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ELEMENTS OF PRACTICAL PEDAGOGY

BY

THE BROTHERS OF THE CHRISTIAN SCHOOLS

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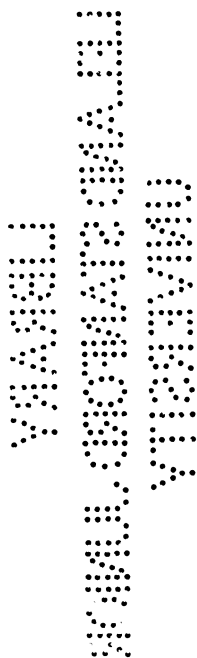


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PREFACE.

EDUCATION is often assumed to be mainly a process by which knowledge is communicated or acquired. It is, indeed, all this and much more, for it aims at developing the powers of the mind, training the will, and forming character. A work on education must, therefore, include the elements of psychology and ethics as well as a detailed account of the canons of pedagogy and accepted methods of teaching. In the following pages, principles are stated and discussed in connection with the practical treatment of the elementary branches taught in the class-room. Where the abstract is introduced, the concrete application immediately follows.

As the school is to be a nursery of good citizenship, moral teaching accompanies the intellectual, the conscience being formed in accordance with the precepts of religion.

Attention has been paid to the vitally important subject of hygiene in order that the teacher may be fully alive to his responsibilities in regard to the well-being and comfort of his youthful charges. The value of gymnastics and physical drill as aids in the art of education, has not been overlooked.

Though the present volume is necessarily small, it is believed that no subject of importance has been omitted. A fuller development will be given in a compendious work on pedagogy which is in course of preparation and which will be ready for publication early in the summer.

NEW YORK, November, 1905.

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INTRODUCTION.

Nature and Objects of Pedagogy. Pedagogy is the science and art of education and teaching. Its object is twofold: to state the general principles that govern the normal development of the physical, intellectual, moral, religious, and social life of the child; and to show how these general principles are applied in school by the best methods and management.

Teaching and education are bound together as means and end: teaching enriches the mind with various branches of knowledge; education develops the faculties, and inclines the soul to the practice of good. Hence, though taking them separately, the better to study their details, pedagogy does not lose sight of their necessary union in the action of the teacher with regard to the child he has to instruct and educate.

Importance of Pedagogy. The craftsman learns his trade; the painter and the sculptor never neglect the theory for the practice of their respective arts, even though they may have attained the highest eminence in their avocations. But no craftsman, "painter, sculptor, or any other artist, attains the eminence of him who

INTRODUCTION.

knows how to train youth.”¹ The educator would then fail in his duty were he to neglect to study the means of becoming skilful in his noble profession, or cease his endeavors to perfect himself more and more.

It is an undeniable fact that natural aptitude, the desire for good, the ardor of devotedness, and personal initiative do not usually suffice to make a good teacher. These happy dispositions need to be directed, and their exercise must be made fruitful by the experience of those who have practised the art of education. The study of serious pedagogical works, and the advice of enlightened guides, together with daily observation and reflection, are the means the teacher must make use of if he would advance in his art—an art in which even the most skilful will every day find something new to learn.

The present work specially insists on the application of principles—hence its title: **“Elements of Practical Pedagogy.”** It is divided into five parts:

Part I.—Education.

Part II.—The School and School Regulations.

Part III.—Organization of Teaching.

Part IV.—The Specialties of the Programme.

Part V.—Discipline.

¹ St. John Chrysostom.

ELEMENTS OF PRACTICAL PEDAGOGY.

PART I.

EDUCATION.

According to the general acceptation of the word, education is a stimulation and direction of the free activity of man, to lead him to acquire the perfection suitable to his nature; it is the continual unfolding of his powers and faculties, until he has realized the natural and supernatural ideal which God has assigned to him. In proportion as man realizes this ideal, he attains his end: to know God, to love and serve Him in this world, and by this means to attain heaven.

To educate a child is to favor the complete development of the gifts which God has bestowed on him; to form in him the man and the Christian, by habituating him to act only through motives of reason and faith; to excite, protect, and direct the expansion of his faculties, until when left to his own initiative, he can conduct himself in accordance with the prescriptions of duty and the maxims of the Gospel.

Education has principles: it is a professional duty for teachers to know them and to deduce their pedagogical applications. These principles are fully treated in special works on psychology, logic, ethics, and hygiene. The "Elements of Practical Pedagogy," an essentially practical handbook, only formulates them briefly, but it develops their more important applications.

CHAPTER I.

GENERAL CONSIDERATIONS ON EDUCATION.

I.—Necessity and Excellence.

Education is a necessary work: the child, if left to himself, would neither be able to develop his intellectual faculties, nor direct his will and desires according to order. It is an excellent work, since he who devotes himself to it exercises one of the noblest offices of the Christian apostleship. It is also a most meritorious work, on account of the cares and duties which it involves, and the virtues and qualities which it requires in the teacher.¹

The means which the educator has at his disposal are: (1) Teaching; (2) initiation of the pupils in the practices of a Christian life; (3) superintendence; (4) good example; (5) prayer.

Unity and complexity of education. Education is *one* in its object: the whole man has to be formed by the progressive and simultaneous development of all the resources of his nature. It is *complex* because it has both soul and body for its object: under this aspect education is physical, intellectual, moral, and religious.

Physical education superintends and assists the development of the body, by hygienic precautions and exercises selected with discernment.

Intellectual education is applied to perfecting and directing the means of learning, *viz.*, the senses and the understanding. It exercises the memory, the imagination, and the reason, and increases the powers of attention and observation.

¹ A little treatise on the *Virtues and Qualities of a Teacher* has been published in a separate volume.

Moral and religious education tends to make the child a practical Christian. It helps him to preserve the grace of God, and to develop the supernatural gifts received in baptism; strengthens his convictions by the study of Catholic doctrine; fortifies good inclinations and virtuous habits; reacts against irregular tendencies, and imparts uprightness and constancy to the will. It includes the education of the moral sense of conscience and of will.

II.—General Principles of Education.

Every teacher should be thoroughly familiar with the following principles:

1. Man is a perfectible being. Under the influence of education he develops his physical capabilities and mental faculties, and increases his knowledge; and, if he employs the proper means, he may add indefinitely to his moral perfection.

2. The child is not born good; although he has good dispositions, yet he has also strong inclinations to evil.

3. The educator should adapt his action to the order which nature follows in the development of the child's faculties. He must then know this order, and, moreover, study the temperament, the aptitudes, and the character of each of his pupils, that he may vary his instructions accordingly.

4. Many influences should concur in the education of the child: home surroundings, good example given by companions, the instructions and prayers of the teacher, and the ministry of the priest.

5. Religion is at once the foundation and the completion of moral education. Children should be spoken to about God, and taught how to unite themselves to Him by prayer and the reception of the sacraments. All education is incomplete and radically defective that does not take into account the supernatural destiny of the child and the means of attaining it.

6. Every true educator will aim at guiding the physical, intellectual, and volitional activity of his pupils.

While trying to make them choose freely what is good, he will exercise them in those actions of which they ought to acquire a habit.

7. A child must learn to regulate his thoughts and feelings, in order to govern his words and actions properly.

8. The teacher is placed before his pupils as a model for their imitation; hence his conduct should be for them a continual incentive to good.

CHAPTER II.

PHYSICAL EDUCATION.

Physical education comprises the exercise of physical activity and the hygienic precautions necessary for health.

I.—Exercise of Physical Activity.

1. In the class-room children must not be left too long in a position of muscular repose. The teacher should have them change their attitude frequently.

2. The pupils should receive instruction in elementary gymnastics without apparatus, consisting principally in simple movements and marches.

3. The teacher should encourage interest in games at recreation time, and exercise an active vigilance to prevent accidents.

4. The children should be made to understand that though it is good to join with enthusiasm in games, they ought not to carry them so far as to render them injurious to health. Physical activity, like everything else, must be directed by reason and will.

II.—Hygienic Precautions.

School hygiene. 1. An abundance of pure air is indispensable to man. To procure good air the school should be situated at a distance from unsanitary surroundings.

2. Frequent ventilation of the class-rooms is necessary for the health of the pupils, particularly in winter when stoves are used. Keeping the windows closed too long tends to make the children sleepy, to keep them weak, and to favor the propagation of contagious diseases.

3. In winter, the temperature should never be allowed to go higher than from fifty-five to sixty degrees Fahrenheit.

4. During the lessons, the air might be renewed by opening either the ventilators, the fan-lights, or the windows at one side of the class-room; but draughts ought not to be caused.

5. Pupils should hang their overcoats in the cloak-room, and clean their shoes before going into the class-room.

6. The pupils must not be allowed to wear caps, overcoats, or mufflers in the class-room.

7. The class-room should be kept perfectly clean: the floor, by daily sweeping, periodical washing, and use of disinfectants; the wainscoting, walls, and ceiling, by frequent dusting.

8. The out offices should be kept clean by the use of water and disinfectants.

9. It would be imprudent to refuse the children to leave the class-room to satisfy the demands of nature.

10. The school furniture ought to be so constructed that the pupils may not be obliged to take uncomfortable postures, particularly at writing.

11. If the pupils come from a distance to attend school, and bring their mid-day meal, they should be allowed facilities to eat it comfortably.

Precautions against contagious diseases. 1. Children who cannot certify that they have been vaccinated, or revaccinated, if the local rules require it, should not be received into the school.

2. Children who have had infectious diseases, such as small-pox, measles, scarlatina, chicken-pox, influenza, croup or diphtheria, mumps, ringworm, itch, scrofula,

should not be allowed to return to school until they have received a certificate of health from a medical doctor.

3. Children having diseases contagious by imitation, such as epilepsy, Saint Vitus' dance, or nervous convulsions, ought also to be excluded from school.

CHAPTER III.

INTELLECTUAL EDUCATION.

I.—Hygiene and Education of the Senses.

Hygiene of the senses consists in the precautions to be taken to preserve the regular working of their organs.¹

The general object of the education of the senses is: (1) To increase the capacity and perfection of each of them, in the order of its proper stimulus or perceptions; (2) to extend the acquired or common perceptions in which several senses and faculties are involved;² (3) to teach children not to allow themselves to be dominated by their sensations, and the agreeable or disagreeable feelings which accompany them.

The education of the senses is carried on by exercise, and reasoning from experience. This education is very important, since the senses are means of acquiring knowledge. The teacher should attend to the following suggestions:

¹ Hygiene of the senses relates more to physical than to intellectual education. These remarks, however, are placed in this chapter to group together what relates to the senses and their organs.

² The proper stimulus of sight is light, whence is derived the perception of color, which implies perception of limited extension. In examining a peach the sensation of sight tells me only its form and color. But this sensation is not isolated: previously I touched, smelled, and tasted peaches; at the sight of the peach I immediately recall and experience the associated sensations which I previously experienced. Moreover, reason interprets these sensations—recalled, imagined, associated; and by induction it concludes that the fruit is a peach. Thus the perception of sight is completed and extended by acquired perceptions in which memory (recalling previous perceptions of taste, touch, and smell), association, imagination, and induction intervene.

Sight. 1. Avoid what would cause long or strained application of the eyes; hence the books used by the children, especially by the younger children, ought to be printed in large black letters, and the paper might be tinted rather than very white.

2. Recommend the children to hold their books at a distance of about fourteen inches from their eyes when reading.

3. See that the light in the class-room is sufficient but not too strong, and that the pupils receive it not from the front, but from left to right. The coloring of the walls should be neither too bright nor too dark, but rather a pale unpolished green; in summer, curtains may be used to protect the pupils from the dazzling glare of the sun.

4. See that the surface of the black-board be of a dead tone and all wall charts and pictures in use in the class-room be so placed as to receive good light.

5. Place weak-sighted and myopic pupils near the maps and black-board.

6. Exercise the sense of sight during drawing-lessons, by getting the pupils to estimate the height, form, color, position, and distance of objects.

Hearing. 1. Place near the teacher the pupils who are a little deaf.

2. Train both the ear and the voice by exercise in declamation, singing, and vocalization.

3. Prevent piercing and harsh noises from coming suddenly and unexpectedly on the pupils.

4. Never allow the children to put any hard or pointed object into their ears; recommend them to keep these organs very clean.

Taste and touch. 1. Education of the taste is not carried on at school. The pupils may be told that the will should intervene to discourage all gluttony and intemperance in the use of food.

2. By daily inspection, the teacher will be able to insure perfect cleanliness of faces and hands. The children must often be reminded of the necessity of keeping

the skin clean; cleanliness is one of the conditions of health, and a duty imposed by our social relations.

II.—Attention.

Attention in education is a voluntary act by which the intellect is concentrated on an object, in order to study it. It places the faculties in conditions favorable for their exercise: hence the teacher should stimulate it in the children; but he must especially lead them to give it spontaneously and continuously.

Reflection is the act of concentrating the intellect on itself and its own operations. Attentive study is made without distraction—or at least voluntary distraction; reflective study is accompanied by a kind of meditation. Only gradually do children become capable of reflection; in proportion to the amount of reflection, the minds of children acquire that seriousness which makes for success in study. The capacity of an intellect may be judged better by its power of reflection, which varies very much with different pupils, than by its facility in understanding.

1. The first care of the teacher should be to remove by forethought and watchfulness all cause of distraction to the children; such as giddiness, thoughtlessness, verbiage, dreaming, occupations irrelevant to the lesson, idleness, and uncertainty as to what should be done.

2. The attention of the pupils is sustained in proportion to the extent to which their interest is excited, and their intellectual activity exercised; hence the lessons should be well prepared, given with animation and method, enlivened by Socratic questions and intuitive processes.¹

3. Care should be taken not to call the attention of children to too many things at once, above all if they are

¹ Socratic questions are those that lead the children to find out by reflection the fact which one wishes to teach them. Intuitive processes consist principally in placing before the pupils an object to sustain their attention: it is instruction by object lessons.

not familiar, and the explanation presents some difficulty.

4. In object lessons and the explanation of pictures, the pupils ought to be accustomed *to analyze* the objects by passing from the general view to an examination of details.

5. If the lessons are short and varied, the written exercises neither too long nor too difficult, and if the teacher appears interested in what he is explaining, and has the talent to show its practical use, he will develop the power of attention in his pupils.

6. In order that attention may not flag during the lessons, a question may be addressed, now and then, to the whole class; then one pupil is called upon to answer it: in this way inattentive children are often taken by surprise.

7. Written exercises in grammar and lexicology, composition and mathematics, together with Socratic questions, are the best means to strengthen the habit of reflection in children.

8. As a child grows older he must be made to understand that he should apply himself to everything with attention and reflection, less through a hope of reward than to contract a habit of serious work.

III.—Memory.

Memory is the power which the mind has of preserving and reproducing notions that have been acquired; it recalls them either singly or in groups and series.

The qualities of a good memory are: quickness in learning, fidelity in retaining, rapidity and certainty in recalling, and the power of preserving the different ideas confided to it. Among children there is a much smaller number of bad memories than of memories not exercised; and since this faculty is capable of its greatest activity in youth, care should be taken to cultivate it with method and discretion. The rational culture of the memory is given by different processes, which are

often only a practical application of this law: "The preservation of facts is correct and lasting in proportion to the vividness and clearness of the first impressions; the frequent repetition of the facts; and the close association or the logical connection of these ideas with other ideas."

The teacher should attend to the following suggestions:

1. According to the age of the children, exercise simultaneously the *sensile* memory, or that of sensible objects; the *verbal* memory, or that of words; and the *intellective* memory, or that of ideas.

2. Lest the verbal memory be developed at the expense of the intellective, bring the lessons within the capacity of the children who are to learn them; and never present portions of a text-book for study until the ideas and words have been fully explained.

3. Never encumber the memory in trying to enrich it, but aim at order, choice, and suitability in the lessons given, and the studies which follow them; deduce from the mass of details the general ideas which coördinate, and summarize them.

4. Increase the power of voluntary attention, and be ingenious in renewing this attention during each of the school exercises.

5. Help the memory by sight, hearing, and touch, and thus multiply the number of associations relating to the same idea: join the transcription of a text with the reading of it; show an object, have it touched, have the color, form, and details of it distinguished; make use of maps, engravings, and specimens from the school museum.

6. Show the logical connection which the ideas relating to the same subject have with one another, by uniting them in the form of a synoptical table; in history show the simultaneity of events, by presenting them under the form of synchronical tables.

7. Make the pupils acquire many ideas by personal work; these they will retain more easily, and the remembrance will remain more persistently.

8. Specify every day something to be learned literally, increasing the extent of it little by little, without making it too long or too difficult.

9. Pay more attention to the correctness of the recitation than to the rapidity of the study.

10. Have frequent recapitulations and reviews.

IV.—Association of Ideas.

Principles. Association is a law of memory by virtue of which each of our ideas or thought-pictures calls up several others that were at some former time united with it in the mind. The following are examples of the principal relations that cause ideas to associate:

Logical relation of cause to effect, and effect to cause. The thought of God recalls the idea of His goodness. The sight of a crucifix is associated with the idea of our Redeemer's infinite love.

Relation of principle to consequence, and inversely. A temptation awakens the idea of the remorse which would follow the fault, and the severe judgment of God. An upright life suggests the high principles directing it.

Relation of means to end, and inversely. The accomplishment of good is made easy by the thought of God's glory. The thought of an examination recalls the preparatory studies.

Relation of contiguity in time and space. The remembrance of the school recalls the devotedness of the teachers; meeting an old companion brings back the memories of student days. The thought of home revives the appearance of its surroundings, and of the native land.

Accidental relations of similarity and contrast. The face of a certain person reminds one of another; war recalls peace.

Arbitrary or conventional relations. Emblems are generally of such a nature. Thus the violet is accepted

as an emblem of modesty—but any other flower might have been chosen. Justice is represented under the form of a woman holding a balance in equilibrium.

It is especially by the arbitrary and accidental relations of similarity, contrast, interest, and contiguity in space and time that children retain, and hence they have a very superficial memory. By the logical relations of cause and effect, principle and consequence, means and end, substance and accident, the memory brings back within itself the real natural connections of things; it acquires consistency, strength, and unity, and the collection of its recollections is raised to the dignity of science. This, however, is the effect, not of sensile but of intellective memory. Repetition and interest are great aids in making associations permanent.

In the *speculative* order, association is either true or false. It is true if the ideas are bound together logically; but false, if reason or faith does not admit them. In the *practical* order, association is good or bad. It is good if the union of the two ideas forms one proposition that is morally sound; as virtue and happiness, Christian life and sacrifice, success and work. It is bad or dangerous if the union of the ideas forms an erroneous principle; as, youth and right to guilty enjoyments, virtue and unhappiness, means justified by the end.

Practical advice. 1. In the moral order the habit of true association of ideas disposes the will to virtue; the habit of false association inclines it to vice. Hence the educator should: (*a*) Inculcate on his pupils the moral principles and their practical consequences; (*b*) eradicate from their minds false or dangerous associations; (*c*) lead them to avoid the usual causes of false association, such as bad books and vicious companions.

2. In intellectual education true association is not less necessary; it depends partly on the habit of promptly associating ideas according to their logical relations. Reasoning on questions of science, history, or geography, is introduced by logical associations; in written composition, amplification by enumeration of parts, or

by the showing of causes and means, is a chain of true associations—some logical, others accidental. Hence educating the pupil's faculty of association will facilitate his studies.

V.—Imagination.

The imagination is an internal sense which preserves the images of objects perceived by the senses; it afterward reproduces these objects in the exact form under which they appeared; or it combines the elements of images previously received, in order to create a fanciful one. The imagination of children is very lively; the teacher has merely to direct it, discipline it, and make it a help in teaching.

1. The pictures presented to the child should be noble and pure: scenes from nature, historical narratives, stories of travel, poetry, sacred history, the lives of our Lord and the saints, furnish such in abundance.

2. The imagination of young children delights in moral tales, fables, and allegory: it is very advisable to make use of them, provided it be done with discretion and at an opportune time.

3. Illustrations help children to understand abstract subjects; exact, striking, and noble comparisons should often be presented to them.

4. Sketches reproduced from memory, verbal descriptions, compositions, all require a combination of images, and afford the teacher an opportunity of awakening the creative imagination of his pupils.

5. In narratives, oral or written, the teacher should encourage the exercise of imagination; but any incorrectness, incoherence, or vulgarity in the expressions which the children make use of, ought to be corrected with kindness.

6. Anything which may unduly excite the imagination should be carefully avoided; such as terrifying stories, stories of ghosts, or nocturnal apparitions.

7. By religious convictions and practices the pupils should be fortified against any disturbance of the im-

agination, which romantic or unhealthy reading, dangerous spectacles, indiscreet or morbid curiosity, might produce at a later age.

8. Without destroying all their illusions, or crushing youthful enthusiasm, the teacher should prepare the pupils for real life, and present it to them under its true aspect, *i.e.*, as a courageous subjection to daily duty.

VI.—Judgment and Reasoning.

The proper act of the intellect is thought. To think means: (1) To conceive *ideas*; (2) to compare them or express *judgments*; (3) to connect them logically in order to affirm or deny a proposition by means of *reasoning*.¹

Ideas. Ideas are the intellectual representations of things. The chief aim of instruction is to multiply the number of ideas and the words that express them.

1. If instruction is methodical, and if it makes constant demand on the reflective powers, most school exercises will afford new and clear ideas to the children, or will make the ideas previously acquired more clear.

2. In order that ideas may be better impressed on the minds of pupils, and not cause confusion by their number, it is proper to bring into relief the chief ideas in each subject treated, and attach to them the derived or secondary ideas; a teacher who prepares summaries and synoptical tables attends to this principle.

3. One of the best means of giving a child true and correct ideas is to make him understand perfectly the words he reads and makes use of. Without frequent explanation and questions on words, the pupils will listen, study, and repeat without intelligence, and their

¹ Simple apprehension is that first operation of the intellect by which it seizes or perceives an object without any affirmation or negation concerning it. The result of this operation is an ideal reproduction of the object perceived; this reproduction is called a *mental term, concept, notion, or idea*; when viewed as the product of the joint action of object and intellect, it is called a *concept*, and the action producing it is called *conception*.

faculties will never become developed. Explanations are particularly necessary with regard to the technical expressions belonging to each branch of instruction.

4. To give the pupils a distinct knowledge of things it is often useful to explain words by their etymology, and the sense in which they are used.

5. Reading is an abundant source of ideas; therefore, the pupils ought to be encouraged to read good books with attention.

Judgments. Judgment is an act of the intellect by which it affirms or denies the agreement between a subject and an attribute.

1. Every answer to a question is the expression of a judgment; the teacher should exact that answers be complete, correct, and precise.

2. Every sentence contains one or several propositions, that is, one or several judgments; logical analysis shows the child how to distinguish them, and gives him facility in following the connection of ideas in what he reads.

3. In lessons on history and religious instruction, the children may be got to express critical appreciations on the events; and the teacher should correct with kindness whatever is false, inexact, or exaggerated in the statements.

Good sense. Good sense is rectitude of judgment in practical life. It is extremely important to develop it; and with this object the child should be accustomed: (1) to watch himself, that he may say nothing which he does not understand; (2) to reflect, in order not to accept thoughtlessly everything he hears and reads; (3) to be careful not to judge without knowing the motives of actions; (4) to refrain from talkativeness.

Reasoning. Reasoning is the act of the intellect which, from a known truth passes to another yet unknown, by the connection of the second with the first.

Without teaching the laws of logic to the children in

primary schools, they should be taught to reason justly in the following and similar instances: (1) To find out unknown truths, as the answer to a problem in arithmetic; (2) to prove truths which have simply been affirmed, as when they are asked to establish a proposition in morals; (3) to explain effects by their causes, as in object lessons and instruction in history; (4) to refute objections to religious dogma and morals.

To educate the pupils' reasoning power it is proper to exercise them: (1) In *inductive* reasoning, that is, in going from examples to the rule, and from effects to causes; (2) in *deductive* reasoning, that is, in making a judicious application of principles and their consequences.

As induction has for basis, observation, it is the most natural form of reasoning for children, and the easiest; consequently it is of frequent use in instruction in grammar, history, geography, and object lessons.

The deductive method is chiefly used in explaining the theory of arithmetic and in solving problems. As far as their intellectual development allows, the pupils should be accustomed to draw from a general principle the consequences or particular truths contained in it; but they must not be allowed to draw conclusions without having stated the premises.

CHAPTER IV.

EDUCATION OF THE MORAL SENSIBILITY.

I.—General Notions.

1. By moral sensibility is meant all the affective inclinations by reason of which we experience agreeable or disagreeable emotions.

2. Moral inclinations or propensities are the natural, spontaneous, and constant tendencies of the soul toward objects which agree with our moral nature. If these ob-

jects are considered bad or injurious, we feel repelled by them.

3. The actual emotion produced in us is a *feeling*. If agreeable, the feeling produces *pleasure*; if disagreeable, it causes *pain*.

4. The inclinations—the natural springs of activity—have been given to man to aid him in attaining his end; they are then good when directed toward that end. They may induce him to turn away from it, and thus they become bad by abuse or deviation. Education should rule, direct, check, and render them moral, *i.e.*, bring them into subjection to the moral law.

5. Love, or the affective movement which inclines the soul to attach and unite itself to things, is the foundation of all inclinations; but it is very important to distinguish between this *sensible love* and what may be called *love of the will*, which is that disposition of the soul tending freely and voluntarily toward the known good.

6. In the modern sense of the word, *passion* is a lively inclination that has become predominant. It is a violent movement by which one pursues or avoids an object, according as it causes him pleasure or pain. When powerful and ruled by reason, this inclination becomes a good passion, which increases the strength of the faculties, and inclines one vigorously toward good; when violent and perverted, it becomes a bad passion, which blinds the intellect and enslaves the will.

7. The teacher must not be astonished if the pupils offer resistance, and even violent resistance, to his efforts to direct or reform their inclinations, feelings, and passions. Moral education depends on the direction given to the passions; but human endeavors and authority may fail to overcome the child's will: it is by means of instruction, persuasion, good example, and having recourse to supernatural aid that the desired result will be obtained. In this matter the child himself should take an active part: he ought to be induced to overcome himself, and to seek in reflection, prayer, and the sacraments, the courage and efficacious will to do what is right.

II.—Moral Inclinations and Sentiments.

According to their object, inclinations are either *personal*, *social*, or *moral*. The subjoined remarks refer to a few inclinations chosen from each of the three categories.

I.—Personal inclinations. Personal inclinations relate to ourselves, and have their source in self-love. Their principal manifestations are: (1) The love of life or the instinct of self-preservation, and its two correlative tendencies: love of comfort and the instinct of happiness; (2) the instinct of progress, or the inclination to develop our faculties to the utmost extent. From the instinct of progress spring *curiosity*, or the desire of *knowing*; the *need of emotions*; the *love of action*, or the *instinct of activity*, and its derivatives: love of liberty, desire of possession, esteem, honor, and glory; self-esteem, self-confidence, and the feeling of personal dignity.

1. **Instinct of self-preservation and happiness.** The instinct of self-preservation, the love of comfort, and the desire of happiness¹ should be properly guided; and children must be taught to distinguish between well-being and true happiness. The love of comfort, if uncontrolled, becomes egotism, gluttony, intemperance, and sensuality, the ravages of which are deplorable.

2. **Curiosity, the desire of knowledge.** In this inclination the teacher will find a stimulus to the intellectual activity of the children; he can also make use of it to excite in them a love of study. That study may become a source of pleasure to them, it should be made easy, interesting, varied, and personal, by having recourse to the processes which experience and pedagogic science suggest. But love of study for the pleasure

¹ A certain number of inclinations have been called *instincts*, to mark that they are more or less spontaneous; but however strong they may be they have not the characteristics of instinct properly so called, and they may be brought under the influence of reason and will.

which it gives, is not sufficient to prevent carelessness and discouragement; the pupils ought especially to be taught to look on study as a duty, and as a necessary preparation for the career which they will follow when they leave school. The mind should not get free scope to wander indiscriminately over all objects; and pupils must be warned against indiscreet curiosity, which might excite in them the most dangerous passions.

3. **Love of activity and liberty.** Man is active and free by nature; he seeks to act by himself, freely, and in the exercise of his activity experiences keen enjoyment. The teacher should make use of this inclination and the agreeable feeling derived from it, for the intellectual development of his pupils. But it may degenerate into a spirit of independence, which is the source of interior revolts, disobedience, disorder, and insubordination. The teacher must oppose this deviation by means which may induce the child, and if necessary constrain him, to submit to the orders of teachers and school regulations.

4. **Feeling of personal dignity and honor.** The child ought to acquire a high idea of his dignity as man and Christian; hence the sentiment of honor should be excited in him. At the same time he must be warned against pride, vanity, and susceptibility; and encouraged to battle against sin, which is the only real degradation of personal dignity.

II.—Social inclinations. Social inclinations, also called *affections*, spring from the *instinct of sociability* and the *instinct of sympathy*. The chief among them are: the instincts of imitation, emulation, friendship, the domestic affections, kindness, pity, benevolence, and patriotism.

1. **Instinct of imitation.** The instinct of imitation is very powerful in the child, and examples easily influence him; whence the imperious obligation of always giving the pupils good example, and removing any incentives to evil which may arise from dangerous associations. On

the other hand the teacher should be careful lest this imitative tendency weaken the will. Virtuous surroundings help children to be virtuous, and it is necessary to place them in such situations; but they must be constantly reminded that they should be virtuous from conviction, and not merely as a result of the influence of their surroundings.

2. **Emulation.** Emulation is the tendency which induces us to equal, and if possible, to surpass our fellow-men in the acquisition of a quality which they appear to possess in a higher degree than we. To excite emulation among pupils is a means of stimulating their ardor for work, and of sustaining their will in the efforts required for the practice of virtue. It is important to convince them that true emulation consists, not so much in surpassing their companions as in surpassing themselves, by constant efforts to do better. This inclination may thus be prevented from degenerating into pride or jealousy, or from being the cause of dangerous rivalries. (The means of keeping up emulation are explained in Part V.)

3. **Sympathy, pity, friendship.** Sympathy is an inclination in us to share the sentiments of others. It is called *pity* when it makes us compassionate the sorrows of others. A teacher may excite in his pupils the noble sentiment of pity, by making them reflect on the sufferings which they often thoughtlessly witness; by inducing them to afford relief by compassionate kindness, comforting words, and if possible, material aid. To make this feeling and the acts which it inspires meritorious, the children should be reminded that they ought to act through supernatural motives, and thus change natural kindness and benevolence into acts of Christian virtue and charity. Sympathy becomes *friendship* when by mutual kindness it unites two persons intimately with each other. Children should be taught to appreciate the inestimable value of true friendship, founded on virtue, and not on pleasure or interest. All friendship

is false or bad which has any other basis. Too exclusive a friendship for one companion, is a kind of injustice toward the others.

4. Patriotism or love of country. Patriotism is justified by the providential distinction between nations, and by the circumstances, which, for individuals, constitute a common country; such as common past history, and often common language and religion, common sacrifices for the defence of territory, and a filial regard for the ancestors who lived on the soil where the families they founded still dwell. True patriotism is cultivated in school by prayers for the country, instructions in morality, national language and literature, and history; by patriotic songs and recitations, the proper observance of national holidays, and a study of the duties which constitute, for each citizen, his debt toward his country.

III. Higher inclinations. Higher inclinations or aspirations are tendencies toward the ideal and the perfect. They comprise love of truth, which is the principle of science; love of the beautiful, the principle of art; and love of the good, the principle of virtue. But these sentiments are only three aspects of the love of the infinite: thus the higher aspirations relate to God, and are summed up in the sentiment of religion.

1. Love of the good. It is the natural tendency of an upright man to love the good. The moral sentiments which spring from this love are: The pleasure or pain that follows good or bad actions; sympathy for the author of a praiseworthy act, and even admiration, if we see generosity and devotion pushed to heroism; aversion, contempt, and horror for evil, according to the degree of perversity which it reveals. These are noble sentiments which ought to be developed in the souls of children. As to the feeling of pleasure which sometimes accompanies a good action, the teacher should not forget that this moral feeling, of itself, would be but a feeble barrier against the passions. The child must have a love for

duty, which would prompt him to accomplish it in spite of any repugnance he might feel.

2. **Love of God, religious sentiment.** After showing the nobility of this feeling, the teacher should tell the children that it consists in fear, respect, confidence, adoration, and prayer. It will be necessary to make them understand that it is by acts, and not by feelings, that true piety and love of God are shown. At certain times sentiment may be a help to piety, but does not constitute it; at the same time the teacher ought prudently to excite feeling in order to make the children perform their religious duties with joy.

CHAPTER V.

TRAINING OF CONSCIENCE.¹

Importance and necessity. Conscience is reason in so far as it consists in discerning good from evil. It is a practical judgment by which reason applies the moral law to our acts, in order to approve or condemn them; it is the interior rule of conduct. A good conscience is the source of such real happiness that it is the greatest consolation a man can enjoy here below.

The formation of a child's conscience cannot begin at too early an age. Doubtless, the most necessary guidance is that which the priest gives in the exercise of his ministry; but none the less, a serious duty devolves on

¹Consciousness is the knowledge which the soul has of its faculties and their operations. Man not only has sensitive and intellectual cognitions, but he also knows that he has them. The faculty by which the soul is cognizant of its sensations is the common-sense, sometimes called sensitive consciousness. But the knowledge which the soul has of its intellectual affections and of itself is properly called *consciousness* or *apperception*. And because these affections may be viewed either in themselves or in their moral character of goodness or malice, a distinction must be made between *psychological* consciousness, which perceives the existence of the affections, and *moral* consciousness, which tells whether the acts are good or bad. This latter is generally called *conscience*.

the teacher in helping to form the conscience of his pupils. Though he were to make them excellent in all other respects, they should have no true education if their conscience were without rectitude or delicacy, especially if they did not follow its suggestions.

Object to be attained. The teacher should form in his pupils, not the conscience of a good *man of the world*, in the common acceptation of this phrase, but the conscience of a good *Christian man*, which will rule their moral conduct according to the prescriptions of the Gospel. Conscience, when well formed, is *right* or conformable to the moral law; *enlightened* or instructed on the nature and extent of duty, and in the line of conduct to be followed in the different cases which present themselves; *delicate*, that is, always opposed to evil, no matter how trivial, simply because it is a violation of duty. On the other hand, a defective conscience is either erroneous, scrupulous, or lax. The teacher must impress on his pupils the convictions: (1) That it is the duty of each one to enlighten his conscience, and to follow its directions when it is morally certain of the rectitude of an action; (2) that the greatness of the number of the transgressors of a law does not justify their transgression, nor invalidate in any way the obligatory character of that law.

Means to be employed. A child's conscience is trained:

1. By instructions which enlighten, and practical directions which guide it. The child gets these directions and instructions from the priest, and from the teacher during catechisms, and particularly from the confessor in the tribunal of penance.

2. By pious reflections and by the custom of examining his conscience. If made methodically and seriously, this examination enlightens the child on the nature of his acts, on their causes and motives, and on the means of preventing relapses into evil.

3. By the graces of light received in prayer and the reception of the sacraments.

4. By vigilance, which keeps the pupils in the path of duty and gives an opportunity to the teacher, when he sees reason for it, to give them timely warning.

5. By instruction in history, if the narrative of facts is accompanied by an appreciation of the moral value of the actions.

6. By familiar conversations, in which the children will be invited to judge the moral value of actions of which they have read or witnessed.

CHAPTER VI.

EDUCATION OF THE WILL.

The will is an anterior principle by which we act freely and with knowledge. The will is right, if it follows the promptings of conscience and the course which is known to be good; it is perverse, if it violates the moral rule of our actions.

I.—End to be Attained.

The general object to be attained is to impart strength and constancy to the will of the child. It is by increasing, little by little, his power over himself, that he is prepared to act on his own initiative, and always according to duty.

A right will should exercise its influence on the whole man:

1. **On his physical activity.** The will sustains, excites, moderates, and directs the physical activity in acts that are permitted, free, or commanded; it withholds physical activity from unlawful acts.

2. **On the senses.** The will imposes on the senses the privation of what tends to create factitious wants: by the practice of modesty, Christian temperance and pur-

ity, it denies them what might excite sinful cupidity; it sometimes refuses them lawful enjoyments in order to acquire strength to renounce those that are forbidden; and it subjects them to that which is the object of duty.

3. **On the imagination.** Vivid pictures and scenes have a power of exciting us to perform the actions which they suggest to our minds: the will should then guard the imagination from everything that might be the occasion of trouble or wrong.

4. **On the attention and memory.** The influence of the will on the attention consists in making it apply itself to the ideas and objects which it is desirable to study; in maintaining it in this application as long as necessary; and turning it away from whatever may be dangerous. The power of the will over memory consists: in commanding the repetition of acts that fix ideas; in removing distracting causes that prevent recollection; in recalling memories that lead to good, and in dispelling those of a nature to lead to evil.

5. **On the feelings and the character.** When the feelings prompt us to perform our duties, the will finds in them help toward the accomplishment of good. When they tend toward evil, the will opposes to them the law of duty and represses them with energy.

Character is the intellectual and moral physiognomy of a man; it is formed by the aptitudes, inclinations, habits, and the intellectual and moral qualities, whether natural or acquired, of each person. The natural dispositions of children, the moral and religious education they receive at home, the examples before their eyes, and the conduct of those they associate with, create among them very many kinds of character. These may be classified in two general groups: the good and the defective.

Good characters are those in which virtuous leanings and habits overcome the evil tendencies. The chief kinds are the gentle, frank, modest, reserved, affectionate, firm, active, calm, delicate, and noble.

Defective characters are the results of the evil tendencies of nature and of bad habits. The principal types are the indolent, hypocritical, haughty, fickle, and choleric. The will has the power of reforming character by the repetition of acts contrary to its defects.

II.—Means to be Employed.

General rules. The general directions to be followed in educating the will are:

1. Educate and perfect the intellect and the sensibility, since the will in its action has need of the help of these two faculties: this education is the indirect formation of the power to act freely.

2. Do not force the will of a child violently, but incline it to duty by motives furnished by reason and faith.

3. Do not oppose systematically all his wishes, under pretext of accustoming him to obedience: in acting thus there is danger of breaking his will, or of leading him to rebel against all authority; the duty of the teacher is to train the will to yield to duty, and prepare the child to govern himself.

4. Do not leave him to himself, under pretext of giving him an opportunity of doing the right thing spontaneously; but make him obey by subjecting him to strict discipline, at the same time giving scope for initiative and liberty. It is not by encouraging a spirit of independence or passivity that a teacher prepares his pupils for the normal exercise of their liberty, but by prudently directing this liberty.

5. Do not yield to all his caprices, but overcome his opposition by means that will be most sure to lead him back to duty.

6. Strengthen his will against natural weakness, indecision, and inconstancy, by instructions, counsels, varied and efficacious means of emulation, and especially by having recourse to supernatural help.

Practical applications. 1. Give the pupils a thorough knowledge of their duties.

2. Always give, and see that others give, good example to the pupils; examples are the most efficacious means of forming the will. The lives of the saints, and the biographies of illustrious men who have realized great things by tenacious strength of will, form useful readings to excite courage and inspire generous resolutions.

3. Watch with prudence, delicacy, and solicitude over the morality of the pupils, because nothing relaxes and even breaks the strength of the will as the habit of vice.

4. According as it is good or bad, habit facilitates or hinders the performance of duty; consequently, it is indispensable that children be taught to acquire good habits and overcome bad ones. In this way they will be encouraged to struggle against their defects by the practice of the Christian virtues.

The chief virtues which a teacher ought to recommend his pupils to practise are: filial piety, gratitude, obedience, respect for authority, probity, uprightness, loyalty, strength of will in doing good, earnestness at work, temperance, purity, a spirit of sacrifice, gentleness, humility, and love of God.

The faults against which the teacher should warn his pupils are: selfishness, ingratitude, insubordination, dishonesty, dissimulation, lying, fickleness, thoughtlessness, idleness, too great love of comfort, sensuality, spirit of slandering, vanity, pride, and want of piety.

The acquiring of virtues and the struggle against defects are for each pupil a personal work; the energy of a wise and zealous teacher should tend to the directing and sustaining of the will.

5. Since every act one performs is the beginning or confirming of a habit, it is well to encourage even the least efforts, especially in a child who is anxious to correct himself. To prevent a bad habit from gaining ground, care should be taken to fight against it the moment it shows itself.

CHAPTER VII.

RELIGIOUS EDUCATION.

I.—End to be Attained.

In carrying on the religious education of children a teacher should strive: (1) To develop and strengthen their convictions; (2) to accustom them to the practice of virtue; (3) to make them love exercises of piety.

Christian convictions. The child has received in baptism the habitual disposition to believe revealed truths; but by progressive instruction he acquires a knowledge of them. And not only should he know them, but they must remain in him as deep, unshaken convictions, which he must safeguard from everything that might change or weaken them.

Christian virtues. It is not enough for a Christian to believe Catholic dogma; he must practise virtue, that is, conform his thoughts, judgments, and actions to the Christian rules of conduct. So to live and act is to enjoy true happiness; but this requires him to strive against his disorderly inclinations, and to practise the renunciation which the Gospel imposes on the disciples of Jesus Christ. Children cannot be too early initiated to this difficult work; for according to the expression of Holy Scripture, "It is good for a man to bear the yoke of the Lord from his youth."

Christian piety. The duties which the practice of religion imposes are above the unaided strength of man; but by means of prayer he can obtain the divine assistance against temptations and weakness. If a child perform with joy practices of enlightened piety, they will remain dear to him; and even though some practices be left off in days of weakness, many will still survive the storms of the passions and the momentary forgetfulness

of even the most essential duties, and will be a guarantee of final repentance.

II.—Means of Religious Education.

The means of carrying on religious education in school are: instruction, example, and the supernatural spirit of the teacher. Religious instruction may be given directly or indirectly: *directly*, in the Catechism and exhortations which the teacher gives his pupils every day; *indirectly* by remarks, appreciations, and recall of Christian maxims during lessons, as circumstances may permit.

Virtue is infused rather than taught, and it is infused principally by example. In the conduct of a virtuous teacher there is a light which makes his pupils see the beauty of well-doing, and a persuasive force, tending to lead their will toward what is good. It is by purity of intention, union with God in prayer, and generosity in sacrifice, that the Christian teacher will make his instruction efficacious, and lead his pupils in the paths of virtue. "Without me," says Jesus Christ, "you can do nothing."

PART II.

THE SCHOOL AND ITS ORGANIZATION.

In order that the children gathered together in a school may receive profitable education and instruction, the school should be properly equipped, and the pupils must attend regularly, and submit to a code of rules.

CHAPTER I.

MATERIAL ORGANIZATION.

I.—School Premises.

The material organization of schools is of the utmost importance. The requirements of hygiene, teaching, and supervision are to be attended to.

The school and class-rooms. The school should be built in a healthy locality, sufficiently remote from noisy, dangerous, or unsanitary neighborhoods. If possible, the class-rooms should be on the ground floor, and on the same level, each having its own entrance. It is desirable that the class-rooms be in a row, and have glazed doors opening on a corridor extending the length of the school. This corridor will cut off the school from outside noises, and may also serve as a cloak-room. If some of the class-rooms occupy the first or second story, the banisters of the staircases should have projecting metal studs at intervals of three or four feet, in view of deterring the chil-

dren from sliding down. A strict superintendence ought to be exercised when the pupils go up or down, especially at recreation time and at dismissal. When the class-rooms face the street or a common yard, the windows should be about five feet above the floor, and have the lower panes frosted. All the windows might be provided with opening casements, so that the room may be ventilated without inconveniencing the children. The class-rooms should, as far as possible, be separated only by glazed partitions, and be large enough to allow fifteen square feet of floor for every child in attendance.

Playground and out-houses. As it is undesirable that the pupils play in the public thoroughfare, a playground should be attached to every school. There might be also a covered shed which could be used as a gymnasium, and for drill exercises in wet weather.

The playground must be large enough to give at least sixty square feet to every pupil; it should be kept clean, and flowers might be cultivated in the corners. The toilets must be so placed that proper vigilance may be exercised, and they should always be kept perfectly clean.

II.—The Furniture of the Class-rooms.

The school furniture and apparatus for instruction comprise:

1. A desk and platform for the teacher.
2. Desks for the pupils.
3. Several black-boards.
4. Apparatus for illustrating the system of weights and measures.
5. Geographical and historical maps.
6. Requisites for heating, lighting, and cleanliness.

The higher classes should have, in addition, a terrestrial globe, a large pair of compasses and set of squares for black-board work; plaster models, and the usual objects for the teaching of drawing; solids of wood or zinc for geometrical demonstrations; engravings for use

in teaching history; the necessary apparatus for first lessons in science; a tuning fork; a clock that strikes the hours and half-hours; and a small bell to give notice of the different exercises.

The primary class-rooms should be provided with reading charts and easels; a ball-frame for arithmetic; and a collection of pictures for object lessons and lessons on sacred and profane history.

Museum. The school museum should contain the things used in giving object lessons, such as specimens of industrial products, models, pictures, engravings, etc. The teacher should ask for them before school hours, and give them back after the lessons. In elementary schools this museum is composed of: (1) Special objects for use in arithmetic, geometry, drawing, history, geography, and magic-lantern views; (2) the general museum, *i.e.*, collections of natural and industrial products, apparatus for experiments in chemistry and physics; (3) the local museum, containing specimens of the special products of the country.

Desks. There are several kinds of desks, each having its own advantages and disadvantages. Whichever kind is most conducive to the comfort of the pupils, and best suited to the different movements they have to make, should be adopted. The height of the desks must be suited to the height of the children. The width of the seat and its distance from the desk should be such as to cause no unnecessary fatigue to the pupils, and to prevent any physical malformation which might result from being continually in a tiring posture: the desks should be so constructed, that their lower edge and the inner edge of the seat be almost in the same vertical plane. At the right-hand side of each pupil a glass or porcelain ink well with a sliding cover, ought to be set in the desk.

In the arrangement of the desks in the class-room, account is to be taken: (1) Of the light, which should come from the left, if there be windows only on one side; (2) of the supervision that must be exercised over the pupils.

Black-boards. The black-board plays an important part in every well-appointed school-room. There should be sufficient black-board surface, either as part of the walls and partitions or as portable boards, so that a large number of pupils may work simultaneously, that synoptic tables may be written out, and summaries made of the principal points of the lessons. A black-board on hinges might be set up in each corner of the class-room; but to avoid accidents that might result from a sudden or quick movement, care must be taken that they do not turn too freely. The special advantage of such a board is that the two sides are available for work, and diagrams and notes of lessons may easily be kept for reference.

The school library. The books in the school library ought to be instructive and moral. Good books intelligently read may be of much assistance when coördinated with school studies. Pupils should be required to give an account of their reading. They might be encouraged to read up special points, upon which they would afterward write a short composition. Where a Catholic Reading Circle has been established the pupils ought to be encouraged to follow its directions.

CHAPTER II.

SCHOOL ATTENDANCE.

I.—Admission of Pupils.

Children may be admitted to school when they have completed their fifth year. Those who have not been vaccinated, or who have a contagious disease, should not be received. At the admission of a child the parents should provide: (1) A certificate, bearing the name and surname of the child, the date of his birth, the address and profession of his parents; (2) a certificate of vaccina-

tion; (3) if the child comes from another school, a certificate of good conduct, which should also state the class in which he was. A register of admission should be kept in every school; in it are entered the name and surname of the pupil, the name, profession, and place of residence of the father, mother, or guardian; the date of the child's birth, the date of his entrance, and later of his leaving school.

New pupils are admitted by the principal. They are then examined, and classed according to proficiency and age. To secure order, the pupils might be admitted at a fixed time, *e.g.*, a quarter of an hour before class. Having informed the parents of the time that the school opens and closes, and of the principal school regulations, the teacher would do well to request them to send the child regularly and punctually.

The grouping of too large a number of pupils in one class is liable to injure the health of the teachers, the discipline of the school, the success of studies, and the formation of character. Thirty or forty pupils in the higher classes, and fifty or sixty in the primary, is a maximum which it is never wise to exceed.

II.—Opening of School.

Entrance of pupils. Pupils should come in time for the beginning of class, but not too early. Those who arrive before the opening of school should observe good order, under the superintendence of a monitor appointed for that purpose. It is very advisable that the teacher be present in the class-room when the pupils arrive; but he ought to encourage them to behave as well in his absence as when he is present, and to do so through a sense of duty. He might give marks of merit to those whose conduct has been exemplary previous to his entrance.

Entrance of the teacher and beginning of work. When the teacher enters the class-room, the pupils should rise as he passes before them, and not sit down

until he makes them a sign to do so. They ought to act in like manner when any person of distinction visits the school. Classes should begin promptly at the hour appointed. As soon as the bell rings, the pupils kneel down and recite the prayer prescribed. The teacher then calls attention by one stroke of the signal or bell and makes signs, successively, to rise, be seated, and begin the class exercises.

III.—Dismissal of Pupils.

The pupils of the primary classes should be dismissed first; then those of the upper classes in such order as may be found convenient. The teacher makes a sign to the pupils of one desk; they leave their places one after another, and go in silence to the place assigned. When all are ready, the teacher strikes his hand three times in succession; at the first stroke the pupils uncover, at the second salute, and at the third file off in order. The teacher will be careful that the pupils conduct themselves in a becoming manner in the streets, that they do not throw stones, run, or shout, and that they act politely. As it is not easy to exercise direct control over them while coming to school or going home, the teacher might instruct some trustworthy pupils to report any unseemly act.

IV.—Attendance and Absence.

Special remarks. Leave of absence should be given rarely, but never without sufficient cause. Irregular pupils learn little, and are an annoyance to teachers. Absence from religious instruction must not be tolerated more than two or three times in succession, and only for very urgent reasons. When a pupil is very useful to his parents, he may be excused from attendance at fixed periods, and in special circumstances.

The absence of a pupil should be reported immediately to the parents. When the pupil returns to class after an absence which has not been authorized, he stands at

some appointed place until he gets permission to follow the lessons again. If often absent in this way, he ought to be accompanied by his parents when he returns.

Means of preventing absence. The teacher should be convinced that the best way of preventing unnecessary absence is to make the school popular with parents and children. As a general rule, when the classes are well conducted, and the instruction practical, methodical, and interesting, absence is rare. To secure the regular attendance of heedless children, some reward may be offered, or they may be appointed to some school office likely to interest them. When such pupils deserve severe punishment their parents must be induced to inflict it, lest the punishment, if given in school, increase their disgust for study. Whatever may be the cause of absence, the great means of preventing it is to gain the coöperation of the parents. It is therefore necessary:

1. To notify the parents when the pupil is absent, and to request them to bring him back themselves.
2. To represent to them the injury that the want of punctuality may cause the pupil, and how detrimental to progress his absence has already been.
3. To accept none but well-founded excuses.
4. To refer every leave of absence to the principal.
5. To have all requests for absence made before the morning or afternoon session.

V.—Vacation.

Vacations are indispensable; but idleness, neglect of prayer, the absence of all supervision, and the influence of bad companions, often make them injurious to mind and heart. To guard against these dangers, a few days before the end of the scholastic year, the teacher ought to prescribe a short programme of studies and exercises for the vacation. A day or two before closing for vacation, the teacher should give an instruction on the manner of spending the holidays. The principal advices to be given to the pupils are:

1. To be respectful and obedient to their parents, affectionate and obliging toward their brothers and sisters, and polite toward those with whom they will have dealings.

2. To remember that they are under strict obligation to assist at Mass on the days prescribed by the Church. In some places it is customary to assemble the pupils at the school before Mass time, and to conduct them to church; they should be advised to be faithful to this meeting, unless they go with their parents.

3. To go to Confession during the vacation, and to Holy Communion if they are authorized.

4. To remember that the practices of piety to which they are accustomed at school, morning and evening prayers, devotion to the Blessed Virgin, offering of their actions to God, etc., are much more necessary during the vacation, on account of the greater difficulty of persevering in good resolutions at that time.

5. To avoid carefully all bad companions, dangerous reading, and all occasions which they know might lead them to evil.

6. To work a little each day at the vacation exercises, and to read some instructive books, which is the best way to preserve knowledge acquired, and to prepare profitably for the classes of the coming year.

Before dismissing the pupils, they should be told the date on which the school will reopen, and warned to come back on that day, half an hour before the time for beginning class.

CHAPTER III.

RULES RELATING TO GOOD EDUCATION AND GENERAL ORDER.

The regular working of a school exacts the willing submission of the pupils to the prescriptions of the daily regulation. Several of these have already been men-

tioned when treating of school attendance. Others relating to good education and general order are here given; it will be well to refer to them frequently in class, by way of advice. These regulations are grouped in the five following sections:

I.—Duties of Pupils Toward Their Teachers.

Pupils should remember that the respect and submission which they owe their parents are also due to the teachers to whom parents delegate their authority. Consequently:

1. The pupils must salute the teacher when passing before him; and when speaking to him they ought to stand up, express themselves respectfully, and avoid using language that might be imperious, unbecoming, or too familiar.

2. They should receive their teacher's commands as they would those of their parents, always complying with them exactly, and never showing bad temper. Murmurs or replies are faults which deserve to be severely reprimanded, because a Christian school is a school of respect.

3. If a pupil thinks himself wronged he must not seek to justify himself immediately, or in a loud voice, or, above all, insolently; but should wait for a suitable time, then give his reasons calmly and respectfully, being persuaded that the teacher will listen to him with kindness.

4. The pupils should thank the teacher when they receive anything from him, and apologize if they cause disturbance.

5. When questioned, they should answer loud enough to be heard, and never reply by a curt *yes* or *no*.

6. The pupils should always observe these rules of politeness toward clergymen and persons of authority with whom they come in contact, as much through a feeling of personal duty as for the good reputation of the school.

II.—Duties of Pupils Toward Their Companions.

The pupils of the same school should live in sincere and cordial friendship with one another.

1. In his relations with companions, a good pupil will always observe those rules of politeness expected from well-bred children. He will observe the maxim, "Do unto others as you would have them do to you," and try to win the esteem and affection of his comrades by simple, gentle, and kindly manners. He may work hard to get the highest place in his class; but if others are more successful, he will show no jealousy nor try to lessen their merit, nor neglect to congratulate them on their success.

2. Pupils should treat one another with deference and consideration; avoid all rude expressions and nick-names and never mock those who have any natural defect. They should also avoid contradicting, teasing, and disputing.

3. If a pupil has wronged his companions, they must not take the law into their own hands, but simply tell the teacher, who will do what he thinks best to allay all feeling of resentment or anger.

4. Complaints about companions must not be too readily accepted by the teacher. A pupil ought to make complaints when the fault is serious; but he should never do so through a spirit of vengeance or a secret desire to injure.

5. Good advice from a companion is sometimes more efficacious than from the teacher. Though the influence of a pupil may not be powerful enough to prevent evil, he should never seem to approve of it through cowardice or human respect.

6. It is very wrong in a pupil to speak against the school regulations or against the teachers, in order to get up a kind of conspiracy, or provoke insubordination.

7. Pupils should never say or do anything in the least offensive to modesty. Any known fault of this nature must be severely punished.

8. When a pupil finds a lost object, and does not know the owner, he should give it to the teacher.

III.—Silence and Deportment.

Silence. 1. In the school-room, silence is a safeguard of discipline, and a necessary condition for serious work; hence pupils should be compelled to observe it exactly.

2. Lessons must be studied in a low voice or mentally.

3. When a pupil wishes to ask for an explanation, he should do so by a sign, without making noise with his fingers; and act similarly when he is able to answer a question about which another pupil hesitates.

4. Silence is particularly necessary at the change of lessons, and when forming into rank. At such times even the teacher must not be spoken to, unless it is indispensable.

5. If a pupil needs to speak to a companion during class, he should ask permission by a sign, say only what is necessary, and that in a low voice. Interchange of notes between children ought to be strictly forbidden.

Deportment during lessons. 1. During the oral lessons, and particularly during catechism, the pupils should sit upright, and keep their hands on the desk, without folding their arms.

2. To avoid being distracted, they should look at the teacher, and not have anything useless in their hands, on the desks, or in their mouths. To eat during a lesson is very ill-mannered.

3. When reading-lessons are carried on at the desks, the pupil should hold the book in both hands, resting it slightly on the desk; and when questioned, leave the book open on the desk, and comply with the rule given above. (Silence, 3.)

4. While the teacher or a pupil works at the black-board, all the others should follow attentively, and not occupy themselves with anything else, unless they have been told to do so.

5. At writing exercises, the body should be almost upright, a little nearer the desk at the left side—the left forearm resting on the desk, the middle of the right forearm leaning on the edge.

IV.—Order and Cleanliness.

Order and cleanliness are very necessary in life; pupils should endeavor to acquire them, by personal neatness, and by care in keeping their books and exercises.

Personal cleanliness. 1. Personal cleanliness is a form of self-respect; it is necessary for morality and health. Every morning, and in every class, there should be an inspection of cleanliness, to make sure that faces and hands are properly washed, clothes clean and not torn, and shoes polished.¹

2. When in class or at recreation, a child has soiled his hands, face, or clothes, he should clean himself before going home.

3. Perfect cleanliness, as well as hygiene and simplicity, repudiates the use of cosmetics and perfumes.

Care of books. 1. The pupils' school-books ought to be covered with strong plain paper.

2. Nothing but the pupil's name and surname should be written in his books. The corners of the leaves must not be turned down; a note-book ought to be used to mark lessons and exercises.

3. Every month the teacher should examine the state of the books.

4. Pupils to whom books are lent should be held responsible for them.

Care of copybooks. 1. Nothing should be written on

¹ In making this inspection a wise teacher rewards by a good mark the children whose cleanliness leaves nothing to be desired, and never makes sarcastic remarks about the others: the families would be humiliated and would resent it. To praise the first by the remarks *good, very good*, and to be silent about the others, is a sufficient lesson for all. After the inspection some general remarks might be made, but personalities should never be indulged in.

the cover of the copybook but the name and surname of the pupil, and the subject or nature of the exercises it contains.

2. The exercise-books should be kept clean and neat, not crushed or turned down at the corners. The pages must be completely filled, none being torn out or passed over.

3. If a margin is not already marked, the pupils should draw one about an inch wide on each page.

4. The pupils ought to be careful of the "rough work" exercise-books in which a first copy of a problem, a dictation, a composition, etc., is made: mistakes in spelling should be neatly underlined, and the correct form written above the word badly spelled; incorrect work in other subjects may be crossed out.

5. The different subdivisions of an exercise ought to be separated by thin lines. Useless or very heavy lines must be avoided.

6. An inspection of exercise-books should take place every week, and notes, such as *very good*, *fair*, and *bad*, or a certain number of marks might be given. These could be added to the marks given for general neatness.¹

Cleanliness of class-room and school. 1. Order and cleanliness are the ornaments of school and class-room; and the pupils should remember that on them chiefly this order depends.

2. They should leave their hats and overcoats in the cloak-room.

3. A basket ought to be used for waste papers and other useless things; nothing should be thrown on the floor. To write on the walls in any part of the school is behavior altogether unworthy of a well-bred child.

4. The playground, the corridors, and particularly the toilets, should be kept perfectly clean.

5. The pupils should be held responsible for any

¹ A fortnightly inspection of exercise-books by the principal would be very advantageous.

damage they cause, either to the school premises or to the school furniture.

6. The pupils must not be allowed to play in class or to eat their lunch in the class-room, except in very severe weather.

V.—Employments to be Intrusted to the Children.

Certain duties which the teachers cannot, or ought not to fulfil themselves, should be intrusted to pupils. To encourage these pupils to perform such duties well, it is advisable to give them a certain number of good marks every week; and to keep up a spirit of emulation among them, they might be changed each month.

The bell-ringer. 1. In every school a pupil should have charge of ringing the bell. He ought to be very regular in attendance, and very punctual in the exercise of his office.

2. He should ring at the beginning of school, and for every change of lessons.

3. Two or three minutes before playtime at mid-day, and before dismissal time in the evening, he should tinkle the bell, as a warning to the pupils to put away their books, papers, etc.

Monitors. 1. There ought to be monitors in all the classes, before school, morning and afternoon, and when the teacher is obliged to leave the class.

2. The monitor of a class must be always at the place assigned him, and give good example to the other pupils: he is appointed not only to watch over them, but also to be their model.

3. The monitors should not threaten or strike any classmate; they may merely note those who misbehave.

4. The teacher should examine reports carefully before punishing the accused; he may privately question the best-behaved pupils who happened to be witnesses, to learn if all occurred as stated.

5. The teacher ought to listen to the complaints made

against the monitor, especially when offered by disinterested, prudent, and well-conducted pupils. Should the monitor be found guilty, he ought to be punished more severely than others who may have committed the same fault, or he might be withdrawn from office.

Sweeping. On account of the many inconveniences arising from the sweeping being done by pupils, it is desirable that a special servant be engaged to do this work. If pupils must be intrusted with it, two of them might be appointed to sweep and dust the class-room every day. Their work should be finished about a quarter of an hour or twenty minutes after dismissal. They should perform it carefully, and without quarelling or idling.

The door-keeper. 1. The duty of the door-keeper is to open and close the class-rooms, morning and afternoon, to fasten the shutters, ventilators, and windows, and to see that the sweeping be properly done.

2. Another pupil ought to be appointed to open and close the school-door during the lessons. This he should do quietly and promptly.

3. This pupil should be regular, modest, well-behaved, and polite. He ought to be placed near the door. The same pupil should not be kept too long at this duty, so that his studies may not suffer.

PART III.

ORGANIZATION OF TEACHING.

General organization of teaching, called also *pedagogical* or *school organization*, prescribes the general regulations for the working of a school. A school is an assembly of pupils differing in age, ability, and acquired knowledge, who are placed under the direction of teachers for a number of years. These pupils are grouped into classes, each class having its special *Time Table* and *Programme*.

The general principles of organization and teaching must be adapted to meet local requirements. Organization is rational, if, taking into account the special circumstances of each school, it facilitates as much as possible the work of the teachers and pupils. It should direct the teachers in the use of the best methods and processes, and place the pupils in the most favorable conditions for their mental and moral development.

CHAPTER I.

GENERAL CONSIDERATIONS ON TEACHING.

Teaching is the methodical communication of knowledge to pupils by the teacher who instructs them. The value of teaching depends on the excellence of the end proposed, and on certain general conditions which shall be specified.

I.—End of Teaching.

Teaching has in reality but one end, to give the pupil as complete a moulding as his age, social standing, and the position he is destined to fill may require. However, three elements may be distinguished in this one end: the acquisition of knowledge, the culture of the faculties, and the development of the moral and Christian sense.

Instruction is a precise and systematized body of knowledge which the pupil assimilates by personal work: *precise*, for no one is an instructed man who has only vague, obscure, incomplete ideas of things; *systematized*, for to know properly is to know things in their causes, and consequently to link together in the mind principles and consequences, laws and their phenomena; *assimilated*, for true knowledge is nothing artificial, applied to the mind from without or simply stored in the memory, but it consists of systems of truths that become an integral part of the mind, and are organized in it to become as active as itself. It may be asserted that an intelligent pupil who leaves the primary school after having seriously followed the programme, is in reality better instructed than another who has been merely a listener to more advanced teaching of which he retains only badly understood and disconnected notions. However important instruction may be, it is much less so than the education of the faculties; for, "the moulding of the mind is more important than its progress." The school should prepare its pupils, not for examinations and competitions, but for life. Now, it is not the man who has most knowledge, who—other things being equal—is best fitted for entering a certain career and succeeding in it; it is rather the man who is quick in taking hold of ideas, seeing what they lead to, and then making use of his own experience, and that of others. In other words it is not "crammed" heads but *trained* ones that do the best and most practical thinking.

To attain this end, the teaching of every specialty should, in method, procedure, and knowledge imparted,

aim at the education of all the faculties of the pupil. The exclusive exercise of any one faculty would destroy the balance and harmony of the mind; it would produce a deformity, something like the bodily deformity produced by the excessive growth of a limb. If one study, mathematics for instance, gives a better training to the judgment by constantly using deductive reasoning, it does not exclude the exercise of memory and imagination; if another, such as the recitation of poems, seems to depend chiefly on memory, it supposes and requires explanations that develop imagination, judgment, and moral sense. Besides, a lesson is educative in proportion to the efforts of the teacher to make it so. His great art is to teach with his whole soul, and to grasp, so to say, the whole soul of each of his pupils. A lesson in history may deeply move the sensibility by the patriotic enthusiasm it excites; it must exercise the practical judgment by the application of moral law to the deeds it tells of; it must speak to reason by the relations of cause and effect it holds out to view; and raise up the soul to God by showing how He rules earthly happenings by the eternal laws of His Providence. And let it not be said that only advanced courses can be thus dealt with, and produce so complex an effect on the faculties; for teachers who, by long experience and great love for children, have discovered the secrets of elementary teaching, well know the many different notions a single lesson properly prepared can make intelligible to minds that are just opening.

Lastly, and principally, the time spent by pupils in school is a time of preparation for the labors and the moral struggles to which all human life owes its greatness and merits. Teachers should, therefore, develop in their pupils moral and Christian sense, form in their conscience firm convictions, and, by the help of God, lead the will to cling resolutely to duty by the habit of virtue.

II.—Characteristics of Good Teaching.

Good teaching aims first of all at realizing the intellectual education of pupils; for this purpose it should be *rational* and *adapted to the intelligences* that receive it. It stimulates the assimilation of knowledge by exciting the activity of the pupils; but it will succeed in this only when it is *living and active* in the lessons, *slowly progressive* in its advance, *applied* to varied exercises, *checked* by methods of careful verification, and *repeated* by recapitulation. It is *constant* in the employment of means acknowledged to be efficacious, for such constancy alone can secure success; it is *practical*, so as to prepare the pupils for their future positions in social life; it is *moral and Christian*, to guide them toward their eternal destiny.

Teaching should be rational. It will be such if the teacher satisfies himself that the subjects and the means he employs in teaching them are beneficial to the pupils; if he conforms to the nature and the mode of action of the faculties of his pupils, and develops them harmoniously; and if he exercises chiefly their reason and judgment. The gardener adapts his care to the nature of plants; with much greater reason should a skilful teacher endeavor to base his instruction on the laws that govern the human mind, and particularly those that rule in the acquisition of knowledge. The intelligence in admitting truth is satisfied only when teaching is clear, logical, and convincing; and, therefore, whatever be the subject treated, and the aptitude of the pupils, the teacher should: (1) Base his assertions on proofs which he has made intelligible by sufficient explanations; (2) proceed from the known to the unknown, from the near to the remote, from the simple to the complex, and, when possible, from the particular to the general, from the concrete to the abstract, from the sensible to the immaterial; (3) omit nothing essential in the questions explained; (4) show how the different ideas relating to the same subject are connected; (5) endeavor himself to

acquire not only knowledge but the method of communicating it with the propriety and clearness which will infallibly shed light on minds.

Teaching should be adapted to the intelligence of the pupils. Truth communicated by teaching has often been compared to food, which becomes profitable only by assimilation. This comparison is justified by the general likeness between the work that transforms food into our substance, and that which changes acquired notions into personal knowledge. The intelligence of the child has special exigencies; for it is weak, little exercised, wholly given up to impressions and ideas that come from without, unskilful in abstract deductions, easily carried away by distraction from the object presented to it, incapable of receiving, and especially of classifying many notions without confounding them. Consequently, a wise teacher will not try to teach pupils all that he knows on a given subject, but only what is necessary and opportune; and he will introduce great variety into school exercises, in order to excite interest, and maintain ardor in work.

Common-sense, a little experience, and docility toward those who guide him, will point out to the teacher the ordinary road to follow to keep within reach of the pupils. He must come within their *reach*, but not descend to their *level*; for this would often mean sinking to puerility and triviality, and would not be educating, which means bringing up. A notion is within the reach of a child, when he can by a moderate effort, and with the help of his teacher, grasp it, understand it, and make use of it in exercises. This effort is necessary; but if it be excessive the child is thrown into discouragement by weariness or inability.

Teaching should be living and active. *On the part of the teacher*, it is living when he teaches with animation and ardor that enliven the pupils, when he presents knowledge under its most captivating aspect, and throws himself so much into the lesson that he may be said to live in it.

Two defects, dulness and routine, may take away from a lesson its activity and life. *Dulness* arises from the exclusive use of the book, the want of personal initiative, commonplace oral explanations, the monotony of the exercises given to the pupils, and sometimes from the want of taste for study, and of care in the preparation of lessons. The book is dry and silent, and if not animated by the voice of the teacher, it is almost powerless to enlighten and warm young minds. *Routine* destroys, little by little, the personal character of the teaching, to substitute *habit*, which becomes less and less voluntary—a mechanical and almost automatic way of acting. The teacher who is dominated by routine repeats every year the same lessons, in nearly the same words, with the same monotonous formulas, and perhaps with diminishing attention and success. When routine has persisted for some considerable time, it produces disaffection toward the teacher, and then a sort of numbness which changes to hopeless apathy. To fight against dulness, the teacher should limit himself to useful explanations, and devote plenty of time to questioning. He must struggle against routine by assiduous work, and conscientious preparation of lessons. For a teacher who remains a long time in the same class, this is the only means of brightening his lessons by new ideas, perfecting his methods, keeping up his own love of study, and of being, as he ought to be, a man of progress. Besides, the intellectual training of pupils is not otherwise possible; for teaching that is dull, cold, and full of routine, wearies and disgusts them.

On the part of the pupils, teaching is animated if it exercises their faculties, captivates their attention, and stimulates their curiosity; if the questions are within their reach, and calculated to make them draw the consequences from the principles laid down; in a word, if the method employed makes them collaborators in the lesson. This is the most powerful means of training the judgment, rectifying errors, and teaching correct reasoning—it is the very soul of teaching.

Teaching should be slowly progressive, repeated, applied to exercises, and checked by questioning. Most of the ideas furnished by teaching are new to the child's intelligence; and hence he must get sufficient time to grasp, classify, retain, and assimilate them. The teacher should guard: (1) Against precipitation—skimming rapidly over difficulties; (2) against a false simplification—mutilating certain subjects under pretext of explaining only essentials; (3) against indiscreet haste, and undue pressure in making children study. He may discover, by a few well-directed questions, whether the children understand what he teaches. But as the best understood rules, and the clearest demonstrations, are likely to be forgotten if the teaching be only oral, pupils should be made to do written exercises, which must afterward be carefully corrected.

Teaching should persevere in definite methods. To change without a very good reason the general method of teaching, even for the sake of avoiding routine, would confuse the mind and weaken the will; for nothing is more opposed to good mental habits than frequent changes. Experience confirms what reason says, *viz.*, that the best results obtained from the pupils are due to the constancy with which the teacher works according to determinate methods and processes; this fixity gives birth to confidence, and communicates to minds a lasting energy.

Teaching should be practical in its tendency. One of the actual preoccupations of primary and secondary teaching is to be practical, that is, to adapt to the wants of life the knowledge given in school. This is legitimate provided that the intellectual and moral training of the children be not thereby sacrificed.¹ Teaching may be made practical in two ways: (1) By a general adaptation

¹ This tendency is not new. Fénelon wrote in 1687: "The great point is to give children a practical knowledge of things." This is what St. John Baptist De La Salle (1651-1719) did in adapting the programmes of studies in his primary and secondary schools to the needs of those who frequented them.

of the studies to the social condition and the future of the pupils; (2) by a special adaptation of these studies to local needs.

Teaching should be moral and Christian. By its greater utilitarian tendency nowadays, teaching, according to a common saying, purposes "to arm pupils for life." Now, for these struggles for existence man is "armed," not only by what he has in his brain, but also and still more by what is in his soul. It is therefore by moral and religious education that teaching becomes a real preparation for life. But to strengthen the convictions and the Christian practices of pupils, it will not suffice to devote daily to catechism and exhortation all the time allotted to them on the time-table; a Christian spirit must permeate all the school exercises. The superior unity of teaching is so much the more complete, and the moral training of pupils the more assured, as the Christian spirit is more dominant in the classes.

CHAPTER II.

DIVISIONS AND PROGRAMMES.

I.—Classes and Grades.

Number of classes in a school. Every school should be divided into at least two classes; and most schools consist of from three to six; the number depends on the school attendance. It is of the greatest importance that the children be grouped according to their abilities and previous knowledge, and that the lessons given them be in keeping with their capabilities.

Grades.

Whatever the number of the classes may be, the pupils should be grouped in two divisions:

The primary department or school, for children of six

to ten years, and the grammar department or school, for children of ten to fourteen years.

Each year's work constitutes a grade. The work of the first year is known as the first grade, and that of the eighth or last year as the eighth grade.

The first four grades are known as the primary grades, and the last four as the grammar grades.

In addition, there might be a class specially organized for children of five and six years, known as the preparatory class, and a high-school class for pupils wishing to continue their studies beyond the grammar grades.

In a school the number of classes does not always correspond to the number of grades. It often happens that one class comprises two different grades, or that the same course is followed in two distinct classes.

ARRANGEMENT OF GRADES

In Elementary Schools of

TWO ROOMS	{ 1st teacher: Grammar grades. 2d teacher: Primary grades.
THREE ROOMS	{ 1st teacher: Grammar grades. 2d teacher: 3d and 4th grades. 3d teacher: 1st and 2d grades.
FOUR ROOMS	{ 1st teacher: 7th and 8th grades. 2d teacher: 5th and 6th grades. 3d teacher: 3d and 4th grades. 4th teacher: 1st and 2d grades.
FIVE ROOMS	{ 1st teacher: 7th and 8th grades. 2d teacher: 5th and 6th grades. 3d teacher: 4th grade. 4th teacher: 2d and 3d grades. 5th teacher: 1st grade.
SIX ROOMS	{ 1st teacher: 7th and 8th grades. 2d teacher: 6th grade. 3d teacher: 5th grade. 4th teacher: 4th grade. 5th teacher: 2d and 3d grades. 6th teacher: 1st grade.
SEVEN ROOMS	{ 1st teacher: 7th and 8th grades. 2d teacher: 6th grade. 3d teacher: 5th grade. 4th teacher: 4th grade. 5th teacher: 3d grade. 6th teacher: 2d grade. 7th teacher: 1st grade.

NOTE.—Whenever work of high-school grade is required in schools having less than nine rooms, assign one room for that work and arrange the elementary work as provided for above.

It must be borne in mind that it is not the age of the child which should determine the division in which he is to be placed, but rather the extent of his knowledge and his facility for learning. Schools of seven or eight classes admit of better organization in the way of teaching, since the number corresponds, more or less, with the duration of the school life. If the school comprise six or more classes, each class might be subdivided into two sections, following the same programme of studies; in this way the clever pupils might be kept together, instead of being held back.

Preparatory class. This class should have the particular attention of the teacher, for the success of the school largely depends on the training given in it. It is advisable to put it in charge of an experienced teacher. If this is not possible, the principal should give every assistance to the young teacher, and make up for his shortcomings by suggestions and advice. He should note the daily progress of this class—for the first reading lessons and copybooks, as well as the first piece of recitation, are great events in every home circle. If a child makes rapid progress, and is fond of his studies and contented, it speaks well for the school and the efforts of the teachers. Parents in such a case will continue to send their children there. On the other hand, if they find that their children make but little progress and are discontented, they will send them elsewhere. This is of course detrimental to a school; and even if the vacant places be refilled, the constant change is a clear proof that there is something radically wrong in the management.

The teacher should remember how essential it is that the lessons in the preparatory class be of short duration. An interval of repose occasionally will serve to freshen the mind. The subjects ought to be varied by object lessons interspersed with appropriate stories. The spontaneous activity of the pupils must be the great aim of the teachers, and be the animating spirit of each lesson.

The little children should, from time to time, during the class hours, have some manual exercises and recreative employments. A change of place and posture is an absolute physical necessity. At fixed times they should march in file to the recreation hall or playground, and go through some drill or gymnastic exercises together. This will give them fresh energy to continue their studies when they return to the class-room.

II.—Programmes.

Subjects of the programme. The programme of studies in a common school should be essentially practical. It comprises: Religious and moral instruction, reading, writing, grammar, spelling, composition, arithmetic, practical geometry, history, geography, object lessons and the elements of science, principles of agriculture, elementary drawing, singing, and gymnastic exercises.

Subdivision of the programme. Toward the close of the vacation, the principal might arrange for the monthly work to be done by each class during the entire scholastic year. In arranging this programme, he should attend to the following points:

1. The parts of each subject to be studied should be definitely specified.

2. Much work should not be assigned for the first two months of the year, but the length and difficulty may be increased for the months from November to May.

3. There ought to be time set apart for recapitulations and reviews, which always prove beneficial in impressing on the mind the essential points of any subject.

At the beginning of each month, the teachers should consult their programme, and fix on the amount of work they are obliged to get through weekly and even daily. But if a teacher find it necessary to dwell at greater length on some special points, on account of the difficulty they present, he need not adhere strictly to the arrange-

ment of time set down, but may act on his own discretion.

Adaptation of a programme for two sections in the same class. As a rule, there is but one programme for the different sections of the same class. Collective lessons are strongly recommended, and nearly all the subjects taught in elementary schools are well adapted to this mode of teaching. Such lessons are very beneficial to the entire class, for the groundwork of any subject is necessary and suitable for every pupil. The teacher may then add any details, facts, or remarks suitable for the more advanced pupils, and from which the most intelligent of the lower section would derive some information. However, for some subjects, arithmetic for example, the sections must work separately: while one is receiving an oral lesson, the other may work silently on slate or paper.

Every one who has ever taught knows the importance and necessity of preparing lessons. Unprepared lessons are apt to be wanting in definiteness. Therefore, in order to avoid indecision on the part of the teacher and loss of time for the pupils, this preparation should comprise: the matter to be taught, the parts to be memorized by the pupils, the exercises to be written in class or at home, and the method of correcting the work. It is very advantageous to take notes of these various items, so that none of them may escape attention. The teacher would do well to have a note-book for this special purpose.

CHAPTER III.

TIME-TABLES.

No definite time-table can be laid down, because of the various conditions of different schools, and the numerous points to be taken into consideration for each. Every teacher must prepare one to suit his own class. In drawing up a time-table, the following principles should be observed:

1. The time given to each subject must vary according to its importance and utility, having regard to the difficulties it may present to the children.

2. The length of the lessons will depend on the age of the pupils and their powers of concentration: the younger they are, the more need they have of variety in their occupations.

3. Lessons should succeed one another in such order that one faculty may not be overtaxed while the others are left inactive.

4. The lessons demanding most strenuous effort, should come when the children are fresh: early in the morning session, or immediately after recreation.

5. Noisy lessons ought to be so distributed that, as far as possible, they may not interfere with one another.

I.—Upper Grammar Grades.

9.00 o'clock	—Morning prayers.
	Hearing of home studies and correction of written work.
9.45	“ —Language. Explanation of written work to be presented next day.
10.30	“ —History or geography.
11.15	“ —Writing (three times a week) or elements of natural science.
11.45	“ —Prayer and dismissal.
1.00	“ —Prayer and explanation of catechism.
1.30	“ —Arithmetic.
2.30	“ —Elements of geometry or drawing.
3.00	“ —Reading of English classics or object lessons.
3.30	“ —Prayer and dismissal.

II.—Lower Grammar Grades.

9.00 o'clock	—Morning prayer, inspection of cleanliness, hearing of home studies, and correction of written work.
9.45	“ —Reading.

- 10.30 o'clock—Language.
 11.15 “ —Writing.
 11.45 “ —Prayer and dismissal.
 1.00 “ —Prayer and explanation of the catechism.
 1.30 “ —Arithmetic.
 2.30 “ —History or geography.
 3.00 “ —Reading of English classics or object lessons.
 3.30 “ —Prayer and dismissal.

III.—Primary Grades.

- 9.00 o'clock—Morning prayer, recitation of home studies and reading.
 9.45 “ —Exercises in numbers.
 10.15 “ —Inspection of cleanliness and recreation.
 10.30 “ —Writing.
 11.00 “ —Second exercise in reading.
 11.30 “ —Prayer and dismissal.
 1.00 “ —Catechism.
 1.30 “ —Reading and elocutionary recitations.
 2.00 “ —Writing or drawing.
 2.30 “ —Recreation.
 2.45 “ —Memory exercises: poetry, tables, etc.
 3.00 “ —Recitation of prayers and catechism.
 Wednesday, singing.

MINUTES PER WEEK.

PRIMARY GRADES.

	1		2		3		4	
	A	B	A	B	A	B	A	B
Opening Exercises	75	75	75	75	75	75	75	75
Religious Instruction	180	180	180	180	180	180	180	180
Language	450	450	450	450	500	500	400	360
Mathematics	200	200	250	250	250	250	300	300
Drawing, etc.	150	150	150	150	100	100	100	100
Music	60	60	60	60	60	60	60	60
Hygiene and Physical Training	200	200	175	175	175	175	125	120
Penmanship	100	100	130	130	130	130	130	130
Nature Study	90	90	90	90	90	90	90	90
Geography . . . . .	...	...	...	...	...	...	125	125
History . . . . .	...	...	...	...	...	...	...	90
Unassigned	145	145	90	90	90	90	70	20

GRAMMAR GRADES.

	5		6		7		8	
	A	B	A	B	A	B	A	B
Opening Exercises	75	75	75	75	75	75	75	75
Religious Instruction	180	180	180	180	180	180	180	180
Language	360	360	360	360	360	360	360	360
Mathematics	300	300	300	300	300	300	300	300
Drawing, etc.	100	100	100	100	90	80	80	80
Music	60	60	60	60	60	60	60	60
Hygiene and Physical Training	100	100	100	100	90	90	90	90
Penmanship	125	125	120	120	90	90	...	...
Nature Study	75	75	...	...	...	...	...	...
Geography	125	125	120	120	100	100	...	...
History	120	120	120	120	120	120	120	120
Elementary Science . . . . .	...	...	...	...	90	80	80	80
Book-keeping . . . . .	...	...	...	...	...	90	100	100
Electives . . . . .	...	...	...	...	...	...	175	175
Unassigned	30	30	105	105	95	25	30	30

CHAPTER IV.

OFFICIAL REGISTERS AND PUPILS' EXERCISE-BOOKS.

I.—The Official Registers.

The register of entrance. This register is kept by the principal, whose office it is to arrange with the parents about the child's admission into the school. The name and surname of each child are entered in it; the date of birth and that of admission into the school; the name, occupation, and residence of the parents or guardians. The date and cause of the pupil's withdrawal from school are also entered therein, and a short and carefully worded note as to his conduct and work while attending school.

The roll-book. This book is used to mark the attendance of pupils.

The report-book. This book shows at a glance the number on the rolls in the several classes, and the number present in each. Hence the average attendance can be calculated daily.

II.—Books for the Use of the Teacher.

Register of competitions. The object of this register is to keep account of class examinations. One column contains an alphabetical list of the pupils. To each subject is allotted one large column, which may be divided into as many smaller columns as the teacher intends to have competitions. There should be at least one a month. The data of this register serve as a guide in the distributing of prizes among the pupils at the close of the scholastic year.

Class memorandum and preparation note-book. The class memorandum is a register in which are written brief outlines of the lessons given during the course of the day, and also notes and references derived from a careful preparation for class.

Memorial. This book contains a list of the children's names in alphabetical order, and shows at a glance whether a child is strong or weak in prayers and other memory lessons. The names of the different memory lessons are written at the heads of columns. Each time a child knows an answer thoroughly, at the general recitation of the lesson, a mark is placed opposite his name in the corresponding column. A different sign will remind the teacher of certain items the child has not yet sufficiently committed to memory.

The knowledge of the principal truths of religion and the practice of the duties of a Christian, are matters of such importance that a teacher should not be content until he knows the extent of religious instruction and the general conduct of each pupil. For this purpose, he should hold an examination in religious instruction at the opening of the scholastic year. He may then put a mark after each child's name, indicating the manner in which he has answered: low marks indicating those who are not sufficiently grounded in the truths necessary to salvation. The teacher ought to make it a point to

question the latter frequently on these important truths, especially on the eves of holidays and on Sundays; and to hold general examinations at least two or three times a year.

The freedom allowed to children in frequenting the Sacraments should not prevent the teacher from prudently noting their conduct in this respect, and giving them good advice from time to time.

III.—The Pupils' Exercise-books.

Number of exercise-books. The pupils should not have many exercise-books; they would fill them slowly, and be apt to keep them in a slovenly condition. The teacher must determine the number necessary for the exercises of the pupils.

Sometimes the children write all their daily exercises in one book, known as the "General Exercise-book." When this is the case, they should have two of these books, so that while the teacher is correcting one, the pupils can work in the other. For many reasons, a separate book for each subject is preferable; the work looks neater, more methodical, and is easier to examine. In the grammar grade the pupils should have, as a rule, three or four different exercise-books, and keep the subjects bearing on one another in the same book.

In many schools the senior pupils have the following exercise-books:

1. One for grammar, and the various branches of the mother-tongue done in class: dictation, analysis, and exercises in lexicology.
2. One for composition, as this subject requires a particular mode of correction.
3. One for mathematical problems, the metric system, exercises in geometry, etc.
4. A Home Exercise-book for English, history, geography, arithmetic, etc. Every pupil might have two such books, so as to be able always to leave one with the teacher for correction.

5. A head-line copybook.

6. A book for map-drawing.

The exercise-books should be kept in perfect order, clean, neat, and not crumpled at the corners. Each pupil might have a pad in which he could work problems, sketch maps, etc., before doing them finally in his exercise-book.

The "circulating" exercise-book. This book is kept in many schools for the upper and lower grammar grades. Each pupil in rotation has the use of it for one day, for his exercises, problems, dictations, etc. It takes the place of his own exercise-book for that special day, and is corrected in a similar manner. At the beginning of each day's class, the pupil who is to have the book writes in it the day of the week and date. For example:

Exercise for Tuesday morning—29th March, 1904.

Exercise for Monday afternoon—28th May, 1904.

If a holiday occurs it is noted in this book, and if it be an extra one, the reason for it is explained. Oral lessons which do not require written work should be also noted. Thus this copybook will show, at a glance, the work done daily and hourly by the class. At the end of school hours, the pupil signs his name at the bottom of the last page of his work, and leaves the book on the teacher's desk.

All the circulating exercise-books of each class should be preserved, so that when an inspector comes to visit the classes, he may, by consulting these exercises, easily form an accurate idea of the work done in the various classes, and of the way the teacher interprets and carries out the programme.

CHAPTER V.

MODES AND METHODS OF TEACHING.

I.—Modes of Teaching.

By the term *mode* in pedagogy is meant the manner in which the teacher exercises his action in the instruction of pupils. The chief modes are: the individual, the simultaneous, the mutual, and the mutual-simultaneous.

The individual mode. The teacher who instructs his pupils by giving them, individually, lessons on each subject, follows the individual mode.¹ This style of teaching is suitable for private tuition only. It has been altogether excluded from public schools owing to the loss of time it causes.

The simultaneous mode. The teacher instructs according to this mode when in giving lessons he addresses the whole class; or when combining the pupils of equal capacity into sections, he teaches one of these sections while the others are studying.

The advantages of the simultaneous mode—a mode which we owe to the genius of St. John Baptist De La Salle—are unquestionable, especially in a school requiring several assistant teachers; for each teacher, having few subdivisions in his class, can give the pupils longer lessons and more constant attention. And by bringing the teacher into direct contact with his pupils, it gives him the means of developing their intellectual faculties, studying their characters and dispositions, and training their hearts to virtue.

The mutual mode. A teacher instructs according to the mutual mode when he divides his pupils into a certain number of sections, and gets more advanced pupils, called *monitors*, to give the lessons, while he confines

¹ This was the general mode employed till the seventeenth century.

himself to the supervision of the general order of the class.¹

This mode of teaching has many serious disadvantages: (1) It fails in establishing direct intercourse between the teacher and his pupils—in fact he is a stranger to them; (2) good monitors are rare, and the instruction given by pupils is generally puerile and of no educational value; (3) no matter how strict and careful the supervision may be, the moral influence of monitors on pupils is disastrous. For these reasons the mutual mode has become almost obsolete.

The mutual-simultaneous mode. In some large classes, and in those comprising several sections, the teacher is obliged to call upon monitors to hear the children repeat their lessons, while he himself teaches each section alternately, using the simultaneous mode. This manner of conducting a school is known as the mutual-simultaneous. It is chiefly employed in primary classes; but in all others, the simultaneous mode should, as a rule, be preferred. However, the function of monitors in the mutual-simultaneous mode is different from that in the mutual: in the former the monitors merely hear the lessons, in the latter they are the sole teachers.

II.—Methods of Teaching.

By *method* of teaching is understood the way followed by the teacher in giving his lessons.

The two general methods of teaching are:

1. The Dogmatic Method.
2. The Inventive Method.

The dogmatic method is also styled the *explanatory* or *affirmative*; and the inventive, the *interrogative* or *Socratic* method.

¹ The mutual mode, which many consider a recent invention, was used in ancient Rome and among the Hindoos, where monitors were employed at least as readers, but it was systematically organized toward the end of the eighteenth century in England and America, by Bell and Lancaster.

Dogmatic method. A teacher is said to employ the dogmatic method when, in giving a lesson, he explains the subject-matter in the form of a lecture, and then questions the pupils, in order to ascertain whether they have understood and remembered his explanations. This method is rarely used in lower grammar grades, on account of the difficulty of fixing the attention of young children for any length of time on the same subject. It is generally used in teaching the higher grades.

In the use of this method the teacher must have regard to: (1) The amount of attention which may be reasonably expected; (2) the nature of certain subjects that can be more effectively taught by the dogmatic than by the interrogative method; (3) the extent of the programme, which may require expeditious methods on account of the many subjects to be treated. Two examples of this method are subjoined:

I. The Noun. I write on the black-board: Leo, George, miller, master, pupil, merchant. Then I say to the pupils: "The word *Leo* stands for a person, the word *George*, for a person, the word *miller*, for a person, so do the words *master* and *pupil*. All words that stand for persons are called *nouns*." Then I give this exercise: "Write down all the names of persons in page . . . of the reading-book."

The same day, or next day, I write on the black-board the words horse, mule, bird, fish. Then I say: "The word *horse* stands for an animal, etc. All words that signify animals are *nouns*." I give as exercise: "Write all the names of animals in page . . . of the reading-book."

In a third exercise, I explain in the same way that the words stone, water, iron, sugar, are names of things; and then give a corresponding exercise.

I now question on these three categories of nouns, and conclude dogmatically by the definition of the noun: *A noun is the name which designates a person, a place, or a thing.*

II. Division. In arithmetic, if I wish to explain the

theory of division of whole numbers, I give first of all the definition: Division is an operation by which I find how many times one number, called *dividend*, contains another number, called *divisor*. The result of the operation is called *quotient*. Then I work some exercises with divisors having successively one, two, three, . . . figures. After this I state that the product of the quotient and the divisor, increased by the remainder, should equal the dividend; then as a check on the preceding operations, I perform the multiplication: this will be the *proof*. The pupils have not taken part in the explanation: it is, therefore, a dogmatic proof.

Inventive method. A teacher employs the inventive method when, by means of a series of well-chosen questions, he leads the children to think out for themselves the fact he wishes to teach them. Whenever possible, especially in the lower and middle divisions, this method of teaching should be used. The teacher's questioning maintains the attention of pupils, excites their curiosity, and stimulates their mental faculties; it accustoms them to reasoning, and develops habits of observation and research.

It is essential to bear in mind that *Socratic* questioning is quite different from questioning by way of examination. The object of Socratic questions is to ascertain whether the pupils have understood the lessons, principles, or definitions—such questions appeal especially to reflection; questions asked at the beginning of religious instruction, relative to truths taught the day before, or those asked in the course of a lesson on grammar, history, etc., to discover if such and such a rule, remark, or historical fact has not been forgotten, are *examination* questions—they appeal especially to memory. By examination questions the pupils are made to repeat that which they have learned; by Socratic questions they are led to find out something which they did not know before.

The inventive method is employed with advantage in primary teaching, but it presents more difficulty than the

dogmatic method. The two are often employed alternately in the same lesson. Experience will enable a teacher to pass with ease from one to the other, according to the requirements of the lesson, and the capabilities of his pupils. Two examples of lessons taught by the inventive method are here given.

I. Suppose I have to make children understand the use of the *qualifying adjective*, I may proceed thus:

1. Get the children to name the several objects they see around them: table, wall, black-board, ball, chalk, etc.; and write these names on the black-board.

2. Get the children to tell the color and form of these objects: long, black, high, gray, square, round, white, etc.; and write the words on the board beside the names of the things that they characterize.

3. Tell them that these words mark the *qualities of the objects* mentioned, and are called *qualifying adjectives*.

II. In teaching *imitation drawing*, if, after a lesson on the cube, we have to study by comparison the cube and the rectangular square prism, I show the cube, and question thus:

What is this object? It is a cube.

How do you know? It has six square sides.

And this (showing the prism)? It is not a cube.

Why? Because the six sides are not squares.

What is the shape of the sides that are not squares? They are rectangles.

How many of them are there? There are four.

In all how many sides has this object? It has six, as the cube has.

What is their form? Four are rectangular, and two are square.

Where are the two square sides? At the two ends of the solid.

These ends are called bases. What difference is there between this object and the cube? The cube has six square sides, and this has only two; the other sides are rectangles.

This solid is called a rectangular prism with a square

base. (I write these words on the black-board, and the pupils copy them in their books.)

Heuristic process. As dogmatic teaching is to be tested by examination questions, Socratic teaching should be tested by exercises which will show whether the matter explained has been understood by the pupils, and whether they are able to apply and to generalize their knowledge. With this object the teacher should briefly indicate an exercise to be performed, leaving the details of invention and execution to the pupils themselves: as problems to be solved, analysis of sentences, plan of a composition to be developed. As in the execution of this work, the pupils themselves should act and think, it is called the *heuristic* process—from a Greek word which signifies *to find out by reflection*. This process develops the intellect, since it obliges the children to *attend* and *reflect*. It is suitable for advanced pupils only, and for subjects depending principally on *reason* and *judgment*.

III.—Analysis and Synthesis.

Analysis and synthesis are the two ways the mind may follow in the study of ideas, facts, or objects; they are also the two ways open to the teacher, whatever be the general method, dogmatic or Socratic, he may have adopted. As processes of teaching, analysis and synthesis are experimental or rational.

Experimental analysis and synthesis. From an empirical point of view, analysis and synthesis are the reverse of each other, and may check each other. The first decomposes an object into its elements; the second recomposes this object with the same elements. *In physics*, for example, the decomposition of the sunlight by the prism, and the recomposition of white light by combining two similar prisms, with their refracting edges turned in opposite directions, and their adjacent faces parallel, may be considered as the analysis and synthesis of white light.

Rational analysis and synthesis. Science is not content with a knowledge of facts; it tries especially to *explain* them. To explain is to link a particular truth to a more general one, a consequence to its principle, an effect to its cause, a phenomenon to its law. Now, explanation may follow two different ways, opposed to each other: it may proceed from the general to the particular—this is *synthesis*; or from particular to general—this is *analysis*. The first is conformable to logical order, which puts the principle before the consequence, the cause before the effect. It is the natural trend of our mind, which explains things by their reasons. Synthesis is, therefore, a *progressive* and *direct* method, and analysis a *regressive* or *inverse* one.

Choice between analysis and synthesis in teaching. In teaching, synthetic presentation is generally preferred, being more direct, rapid, elegant, and satisfying to the mind. Physical sciences, which are essentially inductive and analytical in their development, have a marked tendency to become deductive and synthetic in the mode of presentation; so much so that their progress is noted by the use they can make of the synthetic method.

From the pedagogical point of view, it is well to add here a very important remark. A teacher may propose to himself two distinct things that contribute very unequally to the culture of the mind: to teach the pupils known truths found in books, or to initiate them (in a certain degree) into the art of seeking and discovering new truths by themselves. It is evident that one cannot become a *savant* without receiving lessons from masters of science in the laboratories of special colleges; but every teacher of physical science should have the ambition to make his pupils inventive and capable of profiting by their personal observations. For this purpose analysis is better than synthesis, if it be analytically that the truth taught has been discovered: the pupil assists, so to say, at the discovery; he goes through it again himself in thought, and nothing is more apt to develop and

benefit his mind than to travel again step by step the route followed by the pioneers of science. Synthesis would perhaps initiate the student more rapidly into a knowledge of established truths; but analysis gives him the immense advantage of setting out on the road that may lead to personal discoveries.

Analysis and synthesis united. In practice analysis and synthesis are often united in the same lesson for the explanation of a fact or phenomenon or the demonstration of a theorem. Synthesis could not draw out the relations which the parts of a composite whole have to one another, without an anterior analysis of the elements; and besides, as analysis fixes the attention on isolated elements, it is necessary that it should end in synthesis, in order that the mind may consider a system of ideas, and draw from them general conclusions. When a teacher groups under several distinct heads the many causes—political, financial, social, religious, and moral—of the French Revolution, he synthesizes. But this synthesis is possible only when, by previous analysis, he has dissociated the causes of so complex an event; and to bring out such or such a particular cause, he must have recourse to analysis.

CHAPTER VI.

GENERAL PROCESSES OF TEACHING.

By processes of teaching are understood the practical means the teacher employs, concurrently with the modes and methods, to make lessons clear, interesting, and profitable. Certain processes are followed during the lesson—explanatory processes; others apply to studies and exercises supplementary to the lesson—written and oral processes.

I.—Explanatory Processes.

Intuitive and experimental processes and the use of the black-board are the chief means employed in explanatory teaching.

Intuitive process. A teacher employs this process when he substitutes a concrete object for an abstract idea, in order to make the idea more easily understood. To give the pupils an idea of numbers, units, and tens, by means of a ball-frame or of sticks; to show them a cardboard square or cube, before defining these objects; to show and explain to them a picture representing an event in sacred or profane history; to use charts and maps in teaching geography; not to speak of the thermometer or the mariner's compass without showing these instruments: this is intuitive teaching.

In the lower classes of primary schools this process is indispensable, if the teacher would be clearly understood, and not let the pupils lose time in studying words which, to them, are void of meaning. It is a great aid to pupils in all classes and for most subjects, especially for object lessons and elementary science. Teachers ought therefore to devise suitable illustrations for concrete teaching.

Intuitive processes train: (1) The senses, especially the sight; (2) the intellectual faculties: attention, imagination, judgment, power of observing and reasoning, and correct expression; (3) the conscience. These processes should appeal to as many senses as possible, and be applied in every grade of the school.

Experimental process. The experimental process consists in proving, by means of experiments, the truth of a scientific assertion. It is thus connected more or less closely with the experimental method, which observes natural phenomena or produces them artificially in the conditions most favorable for examination. The teacher employs it in object lessons, and lessons in physical science and agriculture, for the verification and explanation of the phenomena studied. Experiments are immediate,

as in physics and chemistry; or put off to a more or less remote epoch, as in agriculture, arboriculture, and gardening. They are made on inanimate beings, or on animals; and consist of experiments relative to taste and smell, to phenomena of heat, optics, acoustics, and electricity. Experiments on animals should not be cruel, nor should they be disagreeable to onlookers.

The following is an example of this process. Blow into lime-water with a reed: it becomes cloudy and white. The phenomenon does not occur by blowing with bellows; hence we conclude that the breath contains something not in the air, or at least not so abundant in the air: this is carbonic acid.

Experiments may precede or follow the statement of the theory to which they relate. The first way is more educative, especially if practised analytically, and according to the inductive method, essential to every experimental science. It is preferable in elementary teaching, in which it is so common to infer the theory from the experiments that show it.

The use of the black-board. Both teacher and pupils should make frequent use of the black-board; it is the book common to the entire class. Writing, with its principles and head-lines; mathematics, with its demonstrations and solutions; history and geography, with their synoptical tables, charts, and sketches; drawing, with its various patterns; the correction of dictations, compositions, and arithmetic; and nearly all other branches of instruction, require the use of the black-board. It is advisable to bring the children often to the black-board to answer questions, by which the teacher may ascertain whether they have understood what has been taught them.

II.—Oral and Written Processes.

By means of oral and written processes, the teacher finds out whether the lessons which have been given

were understood; and whether the pupils are able to apply the knowledge acquired.

These processes consist of: (1) Written exercises and their corrections; (2) questions on the lessons of the day, or on those of the week; (3) examinations, oral and written.

Written exercises. Too much oral teaching is extremely trying on a teacher; and besides, it often leaves only a fleeting impression on the pupils. It is necessary to repeat the same things frequently to children, but it is still more important that they should write them, in order to impress them thoroughly on the mind. Written exercises, whether performed at home or at school, are a most important part of education. In order that they may be really profitable, the following suggestions should be kept in view:

1. Always to have the written exercise preceded by a precise and adequate explanation of the subject.
2. To suit the exercises to the capacity of the pupils; and for this purpose, to have them neither too difficult nor too long.
3. To vary them from day to day.
4. As far as possible to select subjects which will be at the same time interesting, instructive, and educative.
5. Whatever the given exercises may be, to insist that the pupils complete them, and pay attention to writing and spelling.
6. To look over and correct the exercises regularly. It would be well to make short and carefully written comments on them, or, as is more usual, to mark their per cent.
7. To correct the home exercises daily; otherwise the pupils will derive no advantage from them, but will get into a careless way of working, and so contract bad habits.

Correction of exercises. It is always possible for a teacher to *look over* the exercises to see how they are written and corrected, but it would be too much to expect

him to *correct* them all himself daily; besides, the results would not repay him for the trouble. The *collective* method of correction will be found the most satisfactory. It is carried out orally, and by the use of the black-board. A child designated by the teacher rewrites the given exercise on the board; then by means of a series of questions, the mistakes are pointed out; and each of the other pupils corrects his own work according to what is written before him on the board. Collective correction is expeditious and educative. It may be applied to grammar and dictation exercises, as well as to arithmetic and composition.

Reproduction of corrected exercises. Exercises need not always be rewritten; for instance, it is not necessary to have an exercise rewritten which has been well done by all the pupils. A clean copy, however, is useful in certain cases: it helps to form the handwriting of the child, accustoms him to order and neatness, draws his attention to corrections, and makes him reflect on difficult points. Besides, in a class of several divisions, one division may be thus usefully employed while the teacher is giving a lesson to another.

Questions. Examination questions are indispensable: (1) They give the teacher a knowledge of the daily work and progress of his pupils; (2) they give him an opportunity of correcting the pupils' false statements, and of observing defects in pronunciation; (3) they keep up a spirit of interest and emulation amongst the pupils. The following suggestions on the art of putting questions and eliciting answers will be useful to teachers:

The teacher's questions. 1. Each question should be clear, concise, definite, and suited to the capacity of the pupil. It sometimes happens that an inexperienced teacher, having asked a question in a form which he finds to be not sufficiently clear, puts it in a second and again in a third form. This indecisive manner tends to confuse pupils.

2. In asking a question the teacher should pronounce every word distinctly, emphasizing the word that expresses the principal idea.

3. Questions should follow one another rapidly, so that the pupils may be kept on the alert.

4. The teacher might sometimes follow the order of the desks in questioning the pupils; but to prevent inattention, it is well occasionally to question those who are backward or seemingly inattentive.

5. The teacher might sometimes put a question to the class generally, and wait a moment before indicating the pupil who is to answer it.

6. A question should not always be put in the same words; it is advisable to vary the formula, so as to exercise not only the memory, but more especially the judgment of the pupils.

7. As a rule, questions should be avoided which require only *yes* or *no* for answer. Such questions do not sufficiently exercise the intellect.

8. Questions should be given in the order in which the matter ought to be developed. It is better that they succeed one another in logical order, if they relate to the same subject; but in recapitulations this rule may be deviated from.

9. Even under pretext of exercising the judgment of children, no question should be put that supposes the admission of a false principle or an erroneous proposition.

10. Experienced teachers ask questions at every lesson, on portions of the programme already taught; the previous lessons are thus better impressed on the children's minds.

The answers of the pupils. 1. Pupils should be trained not to answer hastily, but to reflect first on the question put to them.

2. When answering, they should combine the question and answer by expressing all the terms of the proposition, or all the parts of the sentence.

3. They should speak loud enough to be heard by all

their companions, pronounce their words correctly and without precipitation, and articulate clearly.

4. The teacher need not adhere strictly to one particular form of answer; he ought to be satisfied if the answer given is accurate and precise. At the same time, in case of rules or definitions, he should be particular about the terms employed.

5. Since it is by answering that children get practice in speaking, they must be given sufficient time to express themselves correctly. The teacher should be careful not to aid them too much, by giving part of the answer himself, and thus leaving the pupils only the trouble of adding a few words at the end of the sentence.

6. Pupils must not be allowed to answer without being questioned, or having obtained permission to answer.

7. Pupils should be taught to speak correctly, avoiding provincialisms and vulgarisms.

8. If the pupil questioned cannot answer, the teacher should ask another to do so, or give the answer himself.¹

9. Backward pupils should be questioned oftener than others. They must repeat the answer as a whole, and not word by word; if they cannot do so, the answer ought to be subdivided into parts, each having definite meaning.

10. Pupils must not be allowed to laugh at those who answer badly; besides being unbecoming, it disconcerts timid or bashful children.

As many pupils as possible ought to be questioned at each lesson; if some are passed over at one lesson, they must be questioned at the next. But it may be useful to remark that it is not those who have not been questioned during a lesson who profit least, if they have been attentive; memory plays an important part in the acquisition of knowledge and in the development of the faculties.

Recapitulations. As a rule, the memory of children is prompt, but its power of retention is weak. Frequent

¹ The teacher's answers should be exact, short, complete, and easily understood.

and methodical recapitulations are needed to impress facts on their minds. These recapitulations might take place: (1) At the end of each month, or oftener if the age of the children demand them—all the subjects studied during that period should be reviewed; (2) after a series of lessons completing a certain portion of a subject, as catechism, history, geography, or arithmetic. By this means children get a general view of what they had previously learned disconnectedly. When beginning a lesson it is necessary to ask some questions on the preceding lesson in order to show its connection with the present one.

Examinations. In order to insure steady progress, it is necessary to have a weekly examination in the more important subjects, and a monthly one on everything studied by the pupils during the month. The weekly examinations are generally made by the teacher of the class; the monthly ones might be made by the principal of the school. The questions comprised in a test should not be so numerous that they cannot be answered in the prescribed time, nor so difficult that they can be attempted only by the most intelligent pupils. The questions ought to be so chosen: (1) That the greater number of the children may be able to answer some of them correctly; (2) that they will require a sentence or two as answer, not merely a word or date. The heading of a paragraph in the class-book should never be given as a question, as it would merely elicit a literal reproduction of the text. Care must be taken that the children do not copy from one another, or use books or notes surreptitiously. The precaution of placing them apart, or of placing rival competitors beside each other, might be adopted.

Tests may be corrected in the following way: (1) In spelling, by counting the number of mistakes and deducting accordingly from the total of marks; (2) by giving a certain number of marks for each subject; (3) in writing or drawing, by comparing the papers with one

another and allotting marks. The teacher ought to select the method best adapted to each subject.

When a test is corrected, the results should be recorded in a book. To save time the following system might be adopted: (1) The teacher announces to each pupil the number of marks and the place he has obtained; (2) whoever has charge of entering the results calls out the names; each pupil gives his marks, the number of which is then written opposite his name in the record.

As written and oral tests afford a more thorough knowledge of the proficiency of each pupil, the examinations should include both. If the pupils are very numerous they might be questioned somewhat as follows: the first pupil in each desk is questioned on catechism, the second on prayers and sacred history, the third on grammar, and so on; so that every pupil may be examined in at least one subject, and that the knowledge of every subject may be tested. At each examination the method of questioning may be varied. In examining memory lessons, instead of merely having them repeated, some questions might be asked to make sure that the children understand the subject-matter of what they have learned by heart.

To lessen the labor which must necessarily accrue from an examination of this kind, and to save time, the examiner might write the questions on slips of paper, and distribute them at question time among the pupils. Each pupil then reads aloud the question which has fallen to him, and answers it. At the close of the examination, the examiner points out the portions of the programme which it would be well to review before going further. In schools comprising several divisions, the subjects for the monthly examinations might be divided into two groups: one group being examined about the middle of the month, and the other toward the end.

Oral examinations at the end of the year. During the two months which immediately precede the annual public examination, it would be useful to hold oral examina-

tions frequently. In some schools this is done in the following way: The principal makes out a programme of recapitulations for each week; and, on an appointed day, the pupils are questioned by the teachers of the different classes. Thus the children become accustomed to answering, and the teachers secure great influence over them.

CHAPTER VII.

THE ORAL LESSON.

I.—Preparation of the Lesson.

The preparation of lessons may be general and remote, or special and immediate.

The general and remote preparation. This preparation does not consist in foreseeing long beforehand the most circumstantial details of a lesson, but by the teacher preparing himself by assiduous study to fulfil his duties efficiently. It comprises: (1) The studies of the teacher during his training, which studies he should carry on afterward, to keep up and increase his knowledge; (2) the judicious choice of books for himself and his pupils; (3) the review of the week's work; (4) the attentive reading of pedagogical works, and in particular, the study of processes that have received the approval of competent men; (5) the exchange of ideas and views among teachers by means of pedagogical conferences; (6) the collecting of objects that constitute the apparatus of instruction: specimens for museum, botanical specimens, prints for collections, etc.

Pedagogical conferences. A pedagogical conference is a debate among several teachers on questions of education or instruction. Such a conference has many

advantages: it gives the teachers an opportunity of exchanging ideas on professional matters, such as the processes and methods that succeed best; stimulates their ardor for the accomplishment of the duties of their office, which ardor, from the very monotony of the work, tends to diminish day by day; and it gives the president a chance of advising as he thinks proper. The good working of the conference requires that it be directed by a man of intelligence, who will welcome all just and practical views, and be sufficiently experienced to prevent straying into novelties of doubtful benefit.

The conference generally comprises the reading of a paper on a subject proposed beforehand, followed by the discussion of this paper, and by a practical lesson. The secretary of the conference makes a brief note of the work done, the criticism of the lesson, and the leading points in the discussion. A pedagogical paper should be arranged didactically, and have literary form and simplicity. Its chief merit ought to be accuracy of view and practical character of conclusions. After the reading, a courteous discussion begins; every one present is perfectly free to give his opinion, and to point out what he thinks particularly good in the work, as well as the points on which he does not agree with the author. The latter defends his opinion, if the arguments of his opponents do not convince him. The president then summarizes the observations and gives his own judgment.

Immediate preparation. An unprepared lesson is generally badly given. It has neither attraction for the teacher nor interest for the pupils. If the class be composed of several divisions, the disadvantages will be still greater. If everything is not foreseen—illustrations, questions, and the various exercises—the indecision of the teacher makes the pupils lose their time, and idleness soon begets disorder. Works entitled, *Books for the Master*, may help, but they do not dispense from preparation of lessons; the same may be said of educational journals, out of which suitable material might be chosen

and adapted by special preparation to the particular lesson to be given.¹

Nature of this preparation. The preparation of a lesson includes: preparation of the subject or pedagogical preparation, moral preparation, and preparation of materials for illustrations.

The preparation of the subject means: (1) That the lesson is chosen according to the programme of the class, and the special part mapped out for the month's work; (2) that the length of the lesson is limited to suit the intelligence of the pupils, and the amount of time which can be given to it; (3) that it is carefully revised, so that all details may be accurate. Dictation should never be selected at random; the solution of a problem should be foreseen to prevent delay or want of clearness when correcting it; history and geography require immediate preparation, even by the best informed teachers—a sketch useful for explanation may have to be made beforehand, or an historical fact must be read over, so that by adding to the interest of the instruction, some point may be made more clear to the minds of the pupils.

Notes of this preparation ought to be entered in a special book for *notes* of lessons. The teacher must determine: (1) The aim of the lesson, and (2) the most suitable way of introducing it. By the aim, the thoughts of the pupils are to get a definite tendency, and their curiosity is to be roused. The aim may be expressed: (1) In a sentence which simply sets forth the work of the lesson; (2) by a question to which the teacher expects no answer, but which gives a certain turn to the pupil's thoughts; (3) by a problem or an example containing the truth which the pupil is to learn during the lesson. To state the aim of a lesson properly requires great skill on the part of the teacher.

Moral preparation is a sort of examination the teacher puts himself through on his own teaching in a given

¹ In preparing lessons the teacher might ask himself the questions: (1) What points shall I explain? (2) In what order shall I explain them? (3) In what words shall I express my meaning?

specialty, on the difficulty he finds in it, and the efforts he has made to overcome them, on the attention of the pupils, and the means of stimulating their intellectual activity during the lesson.

The preparation of materials consists in getting ready any objects required for a lesson, lest through want of forethought the teacher be obliged to leave the class in order to procure them. Such objects would be maps, charts, pictures for reference, specimens for object lessons, or models for drawings, etc.

II.—The Lesson Proper.

The great art of the teacher consists in giving lessons well, and this art is acquired principally by experience. It is not only a thorough knowledge of the subject which is required, but also a clear method of demonstration, frequent questioning, and clearness and correctness of expression.

Methodical instruction. A teacher is methodical in his instruction: (1) If he follow a logical order in his lesson, whether leading by examples to a rule, or going from a rule to examples;¹ (2) if he develop few points at a time, but explains them clearly and gives numerous exercises on them; (3) if he make sure after the explanation of one part that it has been understood; (4) if he turn every exercise to the greatest possible account, not only in reference to the subject taught at the time, but also with a view to others: for instance, in all written exercises to insist on good writing; in transcribing summaries, to attend to spelling, etc. With this object in view several different uses might be made of a reading lesson: explanation of subject-matter, spelling exercise, and even composition.

Questions during the lesson. Whatever method be

¹ The characteristics of a good division are: (1) That the division be based upon essential distinction of parts; (2) that the members of the division exclude one another; (3) that the parts of the division embrace the whole of the object divided.

employed, frequent questioning during a lesson is absolutely necessary. The maintenance of silence and good deportment in class are quite useless, if the teacher allows the pupils to become merely passive; if he does not arouse their mental activity, their attention quickly strays and their mind wanders, thus rendering the instructions quite ineffective. Even though a lesson be not given by the inventive method, numerous questions should be asked to make the children, as it were, collaborate with the teacher in the explanation of a subject. They might be asked the meaning of a word, the connection of something with a remark that has already been made; they might even be sent for a while to the black-board. Thus the lesson becomes interesting, familiar, and lively.

The teacher's language. During the lesson the teacher's language should be correct, simple, clear, calm, without hurry or exaggerated slowness. The language is clear if the expressions used are suitable to the capacity of the children, and if everything new to them is explained. Sometimes a teacher, though thinking he has only made use of terms quite familiar to the pupils, is not understood, owing to his making use of words whose meaning they are totally ignorant of. It will be well for him to imagine the pupils two years younger than they really are, and to adapt his language accordingly. If the teacher's intonation is dull and monotonous, the attention of the pupils easily wanders; on the other hand, a variety of tone and a certain animation increase very much their interest in the lesson.

Lessons in the different divisions. A lesson generally consists of four parts: (1) A review of the subject of the preceding lesson, to connect the parts of the programme, and to fix them in the minds of the pupils: this review is made either by questions, or by the correction of an exercise in which the lesson has been applied; (2) the explanation of the lesson of the day according to the method and processes decided on as useful; (3) the in-

dication of work to be studied by the pupils, either in their school-books or in a written summary; (4) the explanation of the task to be written, which should be an exercise bearing on the lesson.

Introduction, conclusion, definitions, explanations.

The lesson begins by an *introduction* spoken by the teacher, to excite the attention of his hearers. He should go straight to the subject without delay, and show that it is interesting and practical. The introduction to a lesson admits of various forms. It may be: (1) Simple—barely announcing the subject of the lesson, or writing it on the black-board; (2) recapitulatory—recalling by questions the facts which are necessary to understand the new lesson; (3) insinuating—gaining the attention of pupils by a pleasing aspect, and a promise of some agreeable discoveries; or (4) dramatic—appealing immediately to, and captivating the intelligence.

The *conclusion* summarizes the chief ideas and their consequences, by grouping them synthetically. If many lessons leave only a vague or fleeting impression, it is owing partly to an omission or bad presentation of the conclusion.

Definitions and principles are to a lesson what foundations are to a building. But since definitions and principles are abstract formulas, pupils, and especially young pupils, must be led to them by concrete examples. The definition should be well understood; nothing should be left obscure in any term; and when possible, pupils ought to be encouraged to find the definitions themselves.¹ With beginners, the teacher must not think himself obliged to make them learn first of all the definitions of the science he is to teach, such as definitions of grammar, arithmetic, geography, etc. These are not necessary

¹ The characteristics of a good definition are: (1) It should not be merely negative; (2) it should be short, clear, and precise; (3) it should include neither the name of the thing defined nor any derivation of that name; (4) it should apply to the object and to nothing but the object defined. It should therefore contain neither more nor less than that which explains the thing to be defined.

for the systematizing of the elementary notions explained to the pupils; besides, after a few lessons the pupils will better grasp the synthetic formula which defines the science. The explanations should be simple in form and expression, exact, complete, without prolix details, and made lively by the animation and skill of the teacher. Comparisons and examples, having for object to make a difficult notion clearer, should have a natural connection with it, and be chosen from ideas that are familiar to the child, and neither ridiculous nor vulgar.

Primary grades. In these grades especially, the lessons should be varied and suited to the awakening and developing of the faculties, and preparing them for the acquisition of knowledge. The teacher must question constantly, and adopt the method which makes the instruction most concrete. The lesson should be short, and derive its attractions from the nature of the different exercises which are introduced into it. Exercises written in class, except in arithmetic, will often be a copy of what has been put on the black-board during the lesson; but care should be taken to secure the attention of the pupils by introducing something new: getting them to underline words of two syllables, to place under each word a figure indicating the number of syllables or letters, to point out by a mark or an initial, the nouns, their gender, etc.

Lower grammar grades. The teacher should aim at two results in his lessons: (1) To develop the intellectual faculties of the children by frequent questioning; (2) to elucidate the different parts of the programme by very simple explanations illustrated by numerous examples. Instead of going from the definition or the rule to the examples in which these abstract formulas are applied, the teacher should deduce the rule or the definition from examples. The written exercises ought to demand a greater amount of individual work than in the preceding division.

Upper grammar grades. While following in his lessons the method already described, the teacher should familiarize his pupils with abstract ideas. With this object, the rule or definition after being thoroughly explained, is often made the starting-point of the lesson, and the pupils are required to find illustrations of it.

III.—Exercises and Study.

Every lesson should be followed by an exercise in which the rules explained are applied, and this exercise may or may not be accompanied by study from a text-book. Sometimes the pupils will be expected to have a literal knowledge of the text, at other times they will be required merely to show a knowledge of the sense of it, in answering questions.

Text-book. Purely oral teaching would be wearisome as well as monotonous, and it would be likely to leave only a fleeting impression on the memory of the pupils; it is, therefore, indispensable for them to use a text-book to deepen the impression, and to be a development or a summary of the lesson. The book is less impressive than earnest oral teaching, but it gives occasion for attentive study and recapitulation of lessons taught, and furnishes to the teacher a means of occupying one section of the class while he is explaining the lesson to another. The exclusive use of the book has many inconveniences. It does not make the ideas vivid enough, and is not familiar enough for the child, who is easily disgusted with work. Besides, the certainty of always having a subject "ready," is an inducement to the teacher to shirk the trouble of carefully preparing the lesson.

Setting lessons to be memorized without sufficient explanation is not the right way to use a text-book; by so doing a teacher is abusing the book and neglecting his duty. There are two general ways of using a text-book: (1) To read and comment on the text as a lesson; (2) to read the text after giving the lesson; this second way is

to be preferred. If the pupils are very advanced, their attention need be directed only to certain difficult paragraphs of the book, and they should be left to find out, during study, the substance of the lesson given them. Some developments of the text-book may be replaced by concise notes, presenting the same subject in a different form; and additions may be made to chapters that seem incomplete or too succinct. The use of the text-book will vary according to the specialty. In reading, explanation of literary pieces, and translation of a foreign author, the text itself is the material for work. In catechism, the study of the text follows the oral explanation. In history, the text should be consulted only after the lesson. In arithmetic, at least with young children, explanation on the black-board is nearly everything; the more advanced pupils may consult different mathematical works after the lesson has been explained. In grammar, beginners should be required to study definitions and rules only after having deduced them from examples. In geography, the book is not to be used till after the study of the map. And generally, every study of a text ought to be preceded by explanation and questioning, that the pupils may learn nothing but what they understand. The book is an indispensable help in teaching, but only a help.

CHAPTER VIII.

EXERCISES OF MEMORY.

I.—General Considerations.

Nature of memory exercises. Memory exercises are the studies prescribed for pupils after oral lessons and the explanation of the text. Sometimes these studies are literal or textual; and sometimes they merely consist of the ideas expressed and their connection. Pupils should learn *word for word* the text of the prayers, the

diocesan catechism, passages from the Gospels, and selected pieces which may be given as exercises in recitation. They should reproduce *almost literally* the rules and definitions in grammar, arithmetic, and geography, and also summaries of history, and object lessons. With regard to non-literal studies, it is sufficient for the children to reply correctly to the questions, *giving the ideas* developed in the manuals. Whether literal or not, the lessons learned should be the subject of regular repetitions and revisions, to fix them in the memory of the pupils. For the teacher, *repetition* means going over an explanation again without making any notable changes in it; for the pupil, it is a second study of the same subject. *Review* is, in reality, a new lesson which the teacher gives on the same subject in a more concise form and with new ideas, by grouping into one lesson what had previously been the object of several. Repetition and review are called *recapitulations*; both are memory exercises, but review has for principal object to associate ideas with one another logically in the mind of the child. Children should not be required to memorize lessons that are too long or too difficult. The length and difficulty might be gradually increased, without however going to excess.

Importance of memory exercises. Although the most essential thing in teaching is to form the judgment of the pupils, considerable importance should at the same time be attached to memory lessons. With most children, memory is quickly developed, particularly when the exercises are graded, varied, and interesting. The teacher ought to take advantage of this, but at the same time he must make the pupils memorize only what is really useful. He should try to excite a noble emulation for study among the pupils, and must avoid all threats, because while children are under the influence of fear their minds are not free, and study becomes very difficult and sometimes almost impossible to them. Every means which experience may suggest ought to be employed to get the

pupils to study their lessons regularly at home; the parents might be induced to interest themselves in this work, and be requested to get their children to recite the lessons daily before coming to school.

II.—Textual or Literal Studies.

Explanation of lessons to be studied literally. The teacher should never get the children to learn by heart what they do not understand; they would learn it with great difficulty, and forget it very quickly. It is indispensable that study be always preceded by an oral explanation. The children may then be made to read the text they have to study; it ought to be explained to them with all possible clearness; and a few questions might be put to make sure that they understand it.

Method of studying the text literally. The teacher should tell the pupils that the best way to study a lesson is, not to read it again and again, from one end to the other, but rather to adopt the following method: (1) To read the whole text with great attention, two or three times, to grasp its general meaning and plan; (2) to memorize one or two lines, *i.e.*, a proposition in which an idea is developed; (3) when these are well known, to learn others and to unite them to the previous lines; (4) when in this manner a whole sentence is retained, to repeat it several times without looking at the book, and then go on to another sentence and study it in the same way. Children should not be permitted to study aloud in the class-rooms. Doubtless they would learn more quickly by articulating the words than by merely looking at them, but to preserve order they must be required to study without being heard.

Literal study of lessons in the primary classes. When the children do not know how to read well enough to study by themselves, they may be taught by one of the following forms of the *auditory method*: (1) The pupils who are to learn the same prayer, poetry, answers in

history or geography, are grouped together; the teacher or monitor recites a small portion, five or six words, for instance; all repeat together, two or three times, slowly and distinctly; when these are well known, a few more words are added, and the whole is repeated in the same manner; (2) instead of making all the pupils repeat immediately each fragment studied, some teachers first get the more intelligent children to say it, then all together, and finally the backward ones.

Interrogations and recitations. Interrogations and recitations help to fix in the memory the text of the manual and the explanations of the teacher: a pupil knows only what he retains, and retains well only what he has understood and often repeated. Generally, the questions and recitations should take place during the class hours devoted to the special subjects; thus, a lesson in history will begin by the recitation of the summary of the preceding lesson, and questioning on the facts developed. An exception, however, may be made in the case of the recitation of prayers, of the Gospel, and the catechism, especially in the primary classes. The questioning on these subjects should take place at the beginning of the morning exercises.

The teacher should constantly insist that the recitation be intelligible and intelligent; that is, that the pupils express themselves correctly, that they speak sufficiently slowly, that they articulate clearly and in a natural tone, and especially that they avoid repetition and stammering. It is better that children should have few lessons to study, and that they recite them well, than a great number, and contract the habit of defective pronunciation. In the primary classes, questions and recitations should be a *collective lesson*, that is, all the pupils should listen to and follow the recitation. This method has the advantage of keeping them occupied, and allowing the more intelligent to acquire some useful ideas from the explanations which accompany the recitation.

III.—Study of Selected Texts.

The study of selected pieces should be added to the number of memory exercises given to pupils in all classes: for beginners, fables and simple poetry; for the more advanced, extracts in prose or verse. If the pieces are chosen with discernment and are understood by the children who are to learn them, this study is very profitable. It enriches the vocabulary of the pupils, adorns their memory, suggests to them delicate and noble thoughts, and makes them retain sentences of the best construction. The expressive diction which accompanies the recitation of these texts accustoms the child to speak with ease, grace, and correctness.

With very young children the teacher will use the auditory method, as described above. But before the study, the text should be explained by means of a conversation interspersed with short questions. In the other divisions he first reads the text, explaining the ideas and words; he then reads it with expression: divides the text, if need be, into several parts, and has them repeated by the pupils.

PART IV.

THE TEACHING OF THE DIFFERENT BRANCHES OF THE PROGRAMME.

The methods and procedures which have been explained in Part III. apply to the different branches of the programme; but modifications are necessary for each branch of instruction, according to its object and difficulties, and the class of pupils taught.

CHAPTER I.

RELIGIOUS INSTRUCTION.

I.—Principles and Faculties.

Faculties to be developed. There is no subject of the programme that so completely and efficaciously develops the powers of the soul as religious instruction. By the nature of the truths proposed, the *intelligence* is elevated, and all the secondary faculties connected with this general faculty of knowing are most beneficially exercised. The *attention* is more concentrated, inasmuch as the subject-matter of the study is metaphysical; and the pupil by means of abstraction and reflection rises from the region of matter to that of spirit. The *imagination*, already deeply impressed through the senses with the beauty of the ceremonies of divine worship, is transported into the sphere of the ideal and contemplates the splendor of heaven, the horrors of hell, and in general the

grandeur of the truths so simply expressed in the catechism. *Reason* discovers the relationship and the admirable economy of the dogmas, as well as the harmony between the natural and the supernatural world. The *moral sense* finds in the study of religion full and entire satisfaction which strengthens, ennobles, and purifies all its human sentiments by *love* toward our divine Lord and His most blessed Mother, *pity* and tender *gratitude* for the sufferings they bore for our salvation, *hatred* of sin, *fear* of eternal punishment, *admiration* of the divine perfections, ardent *desire* of heaven, etc. *Conscience* is enlightened and purified by frequent examination and the reception of the sacraments, and thus acquires an exquisite delicacy. The *will*, stimulated by the noblest motives, becomes accustomed to govern the passions; and strengthened by divine grace, it attains a power of action and resistance unknown to purely human wisdom. Lastly, the love and habitual practice of good develop a lively sentiment of moral beauty, which inspires the *taste* with a keen discernment of propriety, and which if united to intellectual culture gives incomparable delicacy and penetration in the appreciation of true beauty.

Principles to be followed. (1) Religious instruction should have for foundation the principles of reason; (2) morals should be based on dogma and dogma on history; (3) the teacher should make his instructions practical by pious reflections, by relating incidents from church history and the lives of the saints, and by suggesting practices for a Christian life.

II.—Division of the Programme.

In Catholic schools religious instruction comprises: study of prayers, catechism, sacred history, and the Gospel. Simple details about liturgy and church history may be added. With the exception of the modifications necessitated by the special circumstances of some schools by diocesan statutes, and by the rules of some parishes

concerning the First Communion, the programme may be arranged somewhat on the following lines:

Lower Primary Grades (two years).	<i>Prayers.</i>	Explanation and study of the prayers: Our Father, Hail Mary, creed, Confiteor.
	<i>Catechism.</i>	Elementary instructions on the principal truths: study of the principal questions of the short catechism of the diocese.
	<i>Bible History.</i>	Stories from sacred history and from the life of our Lord.
Upper Primary Grades (two years).	<i>Prayers.</i>	Repetition of prayers learned in the preceding division. Acts of faith, hope, charity, and contrition. Grace before and after meals. Commandments of God and of the Church.
	<i>Catechism.</i>	Explanation of the words and study of the text of the short catechism of the diocese.
	<i>Sacred History.</i>	Narratives. Explanation of a primary text-book.
Lower Grammar Grades (two years).	<i>Prayers.</i>	Morning and evening prayers. <i>Pater, Ave, Credo, Confiteor, De Profundis</i> , serving of Mass.
	<i>Catechism.</i>	Explanation and study of the text of the catechism of the diocese. The lessons should be adapted as far as possible to the requirements of the First Communion class.

Lower Grammar Grades (two years).	<i>Gospel.</i>	Narratives from the life of our Lord. Explanation and literal study of portions of the Gospels.
	<i>Sacred History.</i>	Suitable text-book.
Upper Grammar Grades (two years).	<i>Prayers.</i>	Review of the prayers already studied.
	<i>Catechism.</i>	Review of the catechism of the diocese—literal study. More advanced explanations.
	<i>Liturgy.</i>	Ceremonies of the Mass, the Sacraments, Blessings, etc.
	<i>Sacred History.</i>	Review (dwelling on the Messianic prophecies). Important events in the history of the Church.
	<i>Gospel.</i>	Literal explanation and study of the text of the Gospels of Sundays and feast days.

III.—General Method of Conducting a Lesson in Christian Doctrine.

The method of teaching catechism consists in explaining the text by making use of the means best suited to the intellectual development of the pupils. The following steps indicate the lines on which a lesson may proceed:

1. Singing a few stanzas of a hymn.
2. Prayer before catechism.
3. A rapid review of the preceding lesson, the principal points of which are questioned on by the teacher.
4. Explanation of each of the questions in the lesson of the day.
5. At the end of the lesson, questions of recapitulation, practical counsels, and indication of the lesson to be studied.

Explanation of the text of the catechism. The explanation of the text of the catechism is given: (1) By means of subquestions bearing on the words, the ideas, and the propositions of the text, by which the teacher satisfies himself that the text is understood; (2) by short explanations, on which the pupils are immediately questioned.

After getting the children to give an account of the subject of the preceding catechism lesson, the teacher formulates or has a pupil to read aloud the first question, as worded in the catechism of the diocese. The question having been proposed, a child is called on to answer it. He answers if he is able; if not, the teacher passes on to a second, and if he does not then get the answer, he gives it himself. To apply to a great number of pupils for a particular answer would be loss of time.

Then begins *an explanation of the catechism by subquestions*. The answer given forms the subject of the lesson. It may contain two, three, or four words the meaning of which the children either do not know or well understand: their literal meaning should be given, and, if needs be, the particular meaning they have in the answer. Comparisons may be made use of; the language, if the pupils be very young, should be simplified to suit their limited vocabularies. When the meaning of the words is understood, the next thing is to explain the meaning of the *propositions*, and the teacher may do this by questioning. When, by questions, he cannot lead the pupils to understand the meaning of the text, *he explains it by a short instruction, or a clear and concise development*. If these explanations are long, they should be divided up and questions asked on them, to ascertain whether they are understood. The teacher may address himself now to an intelligent pupil, then to a backward one, according to the difficulty of the questions.

He should then sum up the general instruction conveyed in the answer thus analyzed, and afterward get the class to repeat the answer once, twice, or oftener, if

necessary. In this way it becomes a formula which, with the explanation of the teacher, will remain fixed in the memories of the pupils. Without this repetition of the same answer, only vague, uncertain, and easily forgotten knowledge would remain; while by frequently repeating the same formula, it becomes indelibly impressed on the memories. And later on when their judgment is developed the pupils will find in the text committed to memory much instruction which perhaps they had scarcely understood at an earlier age.

Remarks relative to subquestions and developments.

The subquestions or interrogations proposed for the purpose of explaining the words of the answers in the catechism, should be clear, simple, and suited to the understanding of all the pupils. If the text of the answer to be explained is complex, that is, formed of several clauses united in the same sentence, these should be separated from one another before explaining them by subquestions.

The developments by which the teacher explains what he cannot elicit by Socratic questions, must be short and contain only a few ideas; they should never consist in a flood of words, nor change the catechism into a sermon. The teacher ought to repeat and have repeated the texts from Holy Scripture, principally from the Gospel, which relate to the subject.

Examples, counsels, recapitulations, and exhortations. The examples related during the catechism to illustrate the truths explained have the great advantage of arousing and holding the attention of the children, and of making the teaching more effective. They may be taken from the lives of the saints, and particularly from the Holy Scripture. After narrating them the teacher ascertains by questions whether the pupils have understood their meaning, and the doctrine in illustration of which they have been given.

Counsels and practical reflections are not out of place during a catechism lesson, since it is necessary not only to

explain the truths, but also to excite the children to the practice of Christian virtues. However, these counsels and reflections should always be few and suited to the lives of the pupils. They may be given during the catechism, after an explanation which leads up to them naturally, or they may be left till the end, and given in the form of a short exhortation. In either case, it is well that the pupils be led to find out for themselves the practical resolution to be made.

The final recapitulations ought to bear on the principal explanations which have been given during the lesson. While teaching catechism, the teacher should speak in a grave and dignified manner of the truths of religion; and inspire his pupils with respect for the presence of God, fear of His judgment, and lively gratitude and generous love toward our Lord: everything in his bearing must indicate his firm conviction of the truth of what he teaches.

Study of the text of the catechism. The *text* of the catechism should never be studied without previous explanation. If a lesson consists of a chapter which has never been studied by the pupils, the explanation of the words and ideas should precede the study; if the lesson has already been explained, the new study, which is in fact only a review, may then precede the class lesson at which the text will be developed more completely than it had hitherto been. The recitation should be textual, *i.e.*, the answers of the catechism should be reproduced word for word.

III.—Remarks Concerning the Different Divisions.

Catechism in the preparatory division. With very young children the object of the lesson is the explanation and study of some very elementary answers of the *short catechism*. For this purpose, two methods are employed—the narrative and the pictorial.

The catechism by narratives. The teacher begins by

telling a Bible story, or some edifying tale relating to one or more questions which he wishes to impress on the minds of the children. After this simple narrative, he may teach the text of the catechism.

1. If the children know how to read, the answer may be written on the black-board and read aloud very distinctly, first individually, then simultaneously. All the important words should be underlined, and the children made to find out their meaning, or the teacher gives it by means of examples and comparisons. To have this answer *studied*, it may be read through a certain number of times, until it is remembered; or after having read it several times, parts of the words may be erased and some words reduced to their initials, and the whole sentence reproduced from memory. The different parts of an answer may be separated by vertical lines: *For what end did God make us?—God made us to know | love | and serve Him here on earth | and thus attain heaven.*

2. If the children do not know how to read, the auditory method must be employed. The teacher pronounces slowly and distinctly the question and answer which he wishes to have learned. He explains carefully the important words; and has the text repeated individually at first, then simultaneously, until it is known. The two or three questions of which the lesson consists are similarly taught and learned, and a few questions are asked on the meanings of the words explained before the study. Even when the children know how to read, they might be taught in this way by simple audition and without using the black-board.

Catechism by explanation of pictures. A mural picture of large dimensions being placed before the children, the teacher draws their attention to it, asks them to explain it, and questions them on the personages, places, and events represented: this is the analysis of the picture. Afterward he may tell the narrative of the scene which is depicted, and explain the text of the catechism which refers to it. The text is then learned according to one of the methods explained above.

Catechism in the primary division. The questions and answers of the short diocesan catechism should be explained and learned by heart. Sometimes one of the methods indicated for the preparatory class is adopted, and sometimes the ordinary method of explanation is followed, taking care to introduce each lesson by some interesting story to captivate the attention of all. Every means of facilitating the study should be employed; such as the division of the answers into their elements, explanation of words and propositions, use of simple terms and familiar comparisons, repetition of explanations by several pupils, etc. When the questions and answers forming the subject of the lesson have been explained in this way, they should be read again in the book.

Catechism preparatory for First Communion. The programme of catechism for First Communion comprises all the diocesan catechism, and a recapitulation of the principal mysteries and the practical truths of religion. The children should know exactly the letter of the catechism, and remember at least the more important of the explanations which have been given. The teacher should unite doctrinal explanation and edifying narratives, but he must especially question the children and make them speak as much as possible. When a lesson has been explained, it is read again in the catechism, and some simple remarks are added to show the connection of the questions with one another.

Catechism after First Communion. The programme comprises: (1) A review of the diocesan catechism accompanied by questions on the text and the explanations given in the preceding classes; (2) fuller explanations of the text; (3) recapitulations of principal mysteries and practical truths. The lesson may be given on the lines already indicated. It is indispensable that the pupils of this division should grasp the connection between the questions constituting each chapter, and that of the chapters among themselves. After reviewing the preceding catechism lesson, care should be taken to

show, when possible, the relation which the subject about to be treated bears to what has already been studied.

V.—Counsels to Catechists.

Preparation of catechism. If it is important that other lessons should be preceded by an immediate preparation, it is still more urgent with regard to religious instruction, the object of which is so vast and sublime. Hence, however great may be his accomplishments otherwise, a prudent teacher will never give a catechism lesson without especial and sufficient preparation. A hasty preparation might cause him to give incomplete or erroneous instruction, or to adopt a method unsuited to the abilities of the children.

To prepare for catechism, the teacher should: (1) Decide upon the subject to be explained and developed; (2) make sure that he fully understands the meaning of all the words employed in the questions and in the answers; (3) formulate subquestions calculated to make the pupils understand the propositions enunciated and the terms employed; (4) introduce developments suggested by the subject; (5) find comparisons to make the pupils understand difficult portions; (6) make a practical application of the subject.

The teacher would do well to take notes of the comparisons or explanations he might have met with in preparing his catechism, the important minor questions, and the reflections; place these notes in his book, and use them during the lesson. This is an excellent means of insuring method, of preventing all wandering from the subject, and of supplying for momentary lapse of memory.

Defects to be avoided in teaching catechism. The following defects should be avoided in catechetical instruction:

1. Explaining a subject which has been insufficiently prepared, and thus exposing one's self to teach erroneous

doctrine, to make numerous repetitions, or to give explanations wanting in clearness.

2. Treating a subject which has not been sufficiently defined, or instead of reducing it to its proper proportions, expanding it by long explanations.

3. Not bringing one's self within the reach of the pupils; making use of abstract or scientific language, instead of simple, intelligible, and concrete expressions, especially with young children.

4. Devoting too much time to discoursing and not enough to questioning.

5. Asking more than three pupils for an answer which the first called on cannot give; having the same answer repeated by too many pupils, thus making the lesson wearisome.

6. Being satisfied with an answer which is *nearly* correct, instead of exacting precision.

7. Sacrificing instruction to pious exhortation; the latter may be introduced only incidentally, and led up to by the instruction.

8. Falling into the opposite defect, that is, addressing one's self continually to the intelligence of the children, and too seldom to their hearts.

9. Speaking in a careless, indolent tone, which would indicate want of conviction or earnestness.

10. Making assertions concerning a subject about which one is not sufficiently informed.

11. In dogmatic and moral instruction, not distinguishing clearly between what is of faith and what is of pious belief, what is of precept and what is merely of counsel.

12. Deciding on matters which are beyond the province of the teacher; for instance, to say "such a sin is mortal, such venial," instead of being satisfied with telling the pupils that "such an act is a sin, a serious fault."

13. Dwelling on indiscreet or petty details; making use of trivial comparisons; quoting examples having neither interest nor authenticity, and no other result,

than that of amusing the children for a moment without any benefit to their religious knowledge.

14. Being too familiar or too severe; reprimanding and inflicting punishments, even though they be just, when they may be postponed without inconvenience.

15. Certain children, who, though dull, are attentive, should not be disheartened either by scarcely ever asking them a question, or by punishing them when they answer only fairly.

16. Allowing children to raise objections or discuss points of doctrine. If a pupil does not understand a word, he may, of course, ask for explanation.

17. Omitting the recapitulation at the end of the catechism.

18. Under pretext of preparing for an examination, transforming the catechism into a mere exercise of textual study.

VI.—The Obligation to Make Pupils Love Religion Through the Catechism. The Way to do It.

It is not enough for a teacher to instruct children in their religious duties and to explain the strict obligation of performing these duties. That they may perform them willingly, both at school and afterward, he must make them feel that God and the Christian religion are worthy, above all things, to captivate the heart of man. With this object the teacher ought to attend to the following recommendations:

1. In explaining dogma, tell pupils that the manifestations of God to the patriarchs and prophets, the miracles of our Lord Jesus Christ, and particularly that of the Resurrection, are historical events better established than those which are admitted without difficulty in profane history.

2. In speaking of God, have Him adored and feared as the Judge from whom nothing is hidden, and who will render to every one according to his work; but also have Him loved as the Benefactor who has put His

power at the service of man, for whom He multiplies acts of incomprehensible goodness. Often recall the wonderful testimonies our Lord has given of His mercy and charity, and make the pupils reflect on the benefits which He unceasingly bestows on each man in particular.

3. Look upon the divine law as a guarantee of happiness to individuals, families, and nations, since it tends to destroy passions and vices, from which all troubles, disorders, and crimes spring.

4. Often speak of the beauty of virtue, the charm of innocence; remind the pupils that the proper effect of religion is not to make those who practise it sad or unsociable, but, on the contrary, to increase joy of conscience, and lead them to devote themselves to the service of their neighbor with affectionate cordiality.

5. Accustom pupils to associate in their minds the idea of duty accomplished and true happiness, of accepted sacrifice and great joy.

6. Look on the sacraments as inestimable benefits, since by communicating divine grace, they raise us to an eminent dignity.

7. Explain to the more advanced pupils how the dogmas of religion—Providence, immortality of the soul, future rewards—and the Sacraments of Penance and the Eucharist, satisfy the highest aspirations of the human soul.

8. In catechetical instructions, in instructions in sacred and profane history, show clearly the social benefits conferred by the Catholic Church.

9. Avoid constraint, inconsiderate zeal, narrowness of judgment and of conduct, in the pious practices which one wishes the pupils to adopt.

10. Establish and hold in honor, the Society of the Children of Mary, the Apostleship of Prayer, and other pious associations which help to make their members understand the happiness of serving God, and practising the works of the Christian apostolate.

11. Explain the incomparable beauty of the liturgical prayers and offices.

12. Show by his own conduct how religion makes those who serve God lovable and self-sacrificing.

VII.—Prayers.

The pupils should know by heart the prayers which are said in class. When questioned on these formulas, they must repeat them in a natural tone, with good pronunciation, and becoming slowness. The meaning of the words composing the prayers should be explained in order that they may be said with intelligence. The children ought also to understand the spiritual meaning of these prayers, that is, the sentiments and petitions which they contain, so that they may pray with the heart as well as with the lips. A Latin prayer should not be studied unless the pupils have first read a translation of it in their own tongue.

To teach the children how to say the Rosary, one or two decades might be recited aloud by two children alternately, beginning with the versicle, "Incline unto my aid, O God," etc., followed by the Creed. At the proper age the children should be taught to meditate on the mysteries of the Rosary.

Study of prayers in the primary classes. When pupils do not know how to read sufficiently well to study by themselves, the prayers might be taught to them by either of the following methods:

1. After a short and simple instruction on the prayer, the teacher pronounces clearly the words of a sentence; he has them repeated after him, first by some of the advanced pupils, then by all together, and finally by the backward ones. He continues thus, adding a new part to what has already been studied, till the whole prayer is well known. Then he explains it again to make it better understood.

2. A prayer may be said in its entirety by one pupil, while all the others who are to learn it pronounce in a low tone what he says aloud. Then the words of the

prayer should be repeated first by a group, and then by all the children.

VIII.—Sacred History and the Gospel.

Sacred history. For very young children sacred history should be limited to a narrative of the most striking facts.

If the teacher has a collection of mural engravings illustrating the events of sacred history, he may use them very advantageously in fixing the wandering attention of children. The lesson then comprises: (1) A series of questions on what the child can discover by observation of the persons, actions, and places which are represented in the picture; ¹ (2) an explanation of the subject represented; (3) the repetition of this by some of the children, at first in answer to questions, and then as a continuous narrative; (4) the deduction of some moral reflections which the subject may suggest, and which should be practical for the young pupils.

If mural engravings are not to be had, and the pupils do not know how to read, they may learn the narrative by listening to it. The narrative might be divided into several parts, each of which should be repeated by some pupils; then the more intelligent may be asked to repeat the entire story.

When the pupils have a manual of sacred history, the lesson may be given as in profane history. A map of Palestine should be used, and the pictures of the manual explained.

Gospel. The Gospel scenes may be taught to young children, either in the form of narratives which the teacher has them to repeat, or by means of engravings representing Gospel scenes. The explanation of engravings should precede the narratives, and in this case the teacher may proceed on the lines indicated above for the teaching of sacred history.

¹ Before these questions, which constitute a *direct analysis* of the picture, some teachers would ask two or three pupils to tell what they see; this is a kind of *free analysis*; incomplete but spontaneous.

The Gospel of Sunday should never be given as a memory lesson without having been previously explained. This may be done in the following manner: (1) Connect the Gospel incident with the life of our Saviour; (2) relate the incident, adding some details, which may make it more intelligible and more interesting; (3) bring out prominently the characters of those figuring in the scenes, especially that of our Lord; (4) bring out very clearly the doctrinal truths and the practical instructions deducible from the narrative. In the recitation of the Gospel the text should be reproduced word for word and the pupils should be questioned on the explanations.

IX.—Special Developments.

SIGN OF THE CROSS (for pupils of seven to eight years of age).

Question. By what sign is a Christian known?

Answer. A Christian is known by the sign of the Cross, which is an abridgment of the truths contained in the Apostles' Creed.

Subquestions. How is a soldier known? A sailor? An officer? The members of certain societies? What then is a sign? What is the first sign of religion that your mother taught you to make?

Q. What does the word sign mean here?

A. The word sign here signifies a mark which distinguishes those who are Christians.

Q. What is the sign of a Christian? What is a Christian? Who is the Chief, the teacher of Christians? Whose disciples are Christians?

Q. What does the sign of the Cross recall to our minds?

A. It recalls to our minds that Jesus Christ died for us.

Q. What does the word recall mean?

A. The word recall means to make us remember.

Q. What kind of death did Jesus Christ suffer for us?

A. Jesus Christ suffered for us death on the Cross.

Exposition. It is by dying on a cross for us that Jesus Christ redeemed us. Now He could not give a greater mark of His love, for as He has said, there is no greater proof of love than to lay down one's life for one's friends. It is also by dying that He merited infinite graces for His Church—that is, the Society of the Faithful who believe in Him.

Q. If a man exposed himself to death to save you from grave danger, would you often think of that benefactor? What then is the duty of Christians with regard to Jesus Christ?

Reflection. It is quite just that the disciples of Christ should often remember the infinite goodness of Him who redeemed them, and the punishment He was pleased to suffer for them; it is for this reason that the first Christians very often made the sign of the Cross, and chose it as a distinctive mark, in order to recognize one another among the pagans.

Q. Why did the Christians choose as a distinctive mark the sign of the Cross?

A. Because this sign reminds us of the death of Jesus Christ.

Q. How does the sign of the Cross remind us of the death of Jesus Christ?

Q. Why choose a sign which recalls the death of our Lord?

A. Because it is by dying on a Cross that our Lord has saved us, and given us the greatest proof of His love.

Q. Give another reason.

A. Because the sign of the Cross is an abridgment of the truths contained in the Apostles' Creed.

Q. What truths does the sign of the Cross recall to mind?

A. The sign of the Cross recalls to our minds the mystery of the Blessed Trinity, the mystery of the Incarnation, and the mystery of the Redemption.

Text of the catechism. Q. How does the sign of the Cross remind us of the mystery of the Blessed Trinity?

A. The sign of the Cross reminds us of the mystery of the Blessed Trinity, because in making it we invoke the three Persons of the Blessed Trinity.

Subquestions. Name the three Persons that we invoke.

A. The three Persons of the Blessed Trinity that we invoke are the Father, the Son, and the Holy Ghost.

Q. Who are these three Persons?

A. They are the three divine Persons.

Explanation. The expression: In the name of the Father, etc., is an excellent prayer which means: "I beseech God the Father, God the Son, and God the Holy Ghost to bless me: May it be so." It has also another sense. When you have said to your father, "Father, I am going to obey and to work, in order to please you," you apply yourself as well as possible. So, when you make the sign of the Cross before prayer or work, that means: "I am going to pray, to work for God: for the Father, whose child I am; for Jesus Christ, His Son, whose brother I am; for the Holy Ghost, who dwells in my soul." If we thought of that, could we pray badly, work badly, since it is *for God, in the name of God, and as children of God, that we act?*

The teacher interrogates on this explanation and continues the development.

LESSON ON CONTRITION (to pupils of nine to ten years).

Text of the catechism. Q. What is contrition?

Contrition is a sorrow and detestation for sins committed, with a firm purpose not to commit them again.

The teacher relates or gets the pupils to relate, the conversion of the prodigal or that of St. Peter, which they may have already heard, or which they may have read in the *Bible history*: by means of questions he gets

them to see in the conduct of those illustrious models, sorrow for having offended God, hatred for sin, and a firm purpose to avoid the occasions of committing it.

Q. What does the word contrition mean? What is broken in the sinner who repents?

Exposition. The word contrition means breaking, the action of breaking. This name is given to repentance for sin, because if repentance is sincere: (1) It breaks the will which had revolted against the orders of God, instead of humbly submitting to them; (2) it breaks the bonds that held it captive to passion and bad habits.

Q. To what is the will of the sinner attached? What does sincere contrition do to deliver the sinner from the slavery of sin? Prove it by the example of the prodigal; by the example of St. Peter. What bonds will he have to break who frequents bad company? How can it be said that he who habitually commits sin is a kind of slave? Is he then no longer free? How can the chains of this slave be broken?

Exposition. Contrition produces in the soul a hatred for sin. It makes us regard sin as a detestable act, which we must avoid at any cost; as a stain that sullies the soul in the eyes of God; as a disease more hideous for the soul than the diseases that prey upon the body.

Q. What does the word detestation mean? What feeling does contrition produce in the soul with regard to sin? Why must we hate sin? To what extent does sin deserve to be hated? What resolution does contrition prompt us to take if it is sincere? What is a resolution? What do the words, good purpose, firm purpose, mean?

Exposition. For this purpose we must avoid the occasions into which we have fallen; otherwise we would repeat the same faults, according to this text of Holy Scripture: "He who loves the danger shall perish therein." Then our souls would be in a still more deplorable state than that from which they had been drawn; this is the teaching of Jesus Christ: "Sin no more, lest something worse happen to you."

Q. Why should sincere repentance for having committed a fault cause us to avoid the occasions of falling into it again? What do you mean by an occasion of sin? How are you to know what has been for you an occasion of sin? In what words does Holy Scripture condemn those who expose themselves to fall into sin? Why shall he who exposes himself to the occasions of sin fall into it? etc.

Reflection. It cannot be said that he really detests sin who returns to the occasions of committing it, nor that he reflects on the evils that follow from it.

Q. What were the consequences of sin for the first man? For his descendants? What did Our Saviour suffer to expiate our sins? What is the first cause of the sufferings of men on earth? Prove it. What is the cause of the sufferings of the souls in Purgatory, and in Hell? Prove it. What evils does sin bring upon us? Should we be firmly resolved to avoid it? What should we do with regard to our defects? Why? What then is the true sign that we detest our sins? Is it necessary to shed tears when we excite ourselves to contrition? etc.

Text. **Q.** What qualities should contrition have?

A. Contrition should be interior, supernatural, universal, and sovereign.

What do you mean by interior Contrition? (To explain the first condition the teacher interrogates the children; then he adds some explanations, quotes a text of Holy Scripture, and proposes subquestions on this development.)

DIVISION AND EXPLANATION OF COMPLEX ANSWERS.

If the answer is complex, that is, formed of different members, the pupils should be led to recognize the parts, as in the following example:

Q. What were the effects of the disobedience of our first parents?

A. In punishment of their disobedience, Adam and Eve were driven out of the terrestrial Paradise, and condemned to eat their bread in the sweat of their brow; they became subject to ignorance, concupiscence, sufferings, and death; and were excluded from the happiness of Heaven.

The teacher decomposes the answer into six parts by means of questions which do not require the whole answer. If the pupil interrogated unites several effects of original sin, the teacher stops him that he may distinguish them from one another.

I. *With young pupils*, the distinction of the parts of the answer should precede all subquestions. They may have the book open before them, and be questioned as follows:

Q. What was the first effect of original sin?

A. The first effect of original sin was that God drove Adam and Eve from the terrestrial Paradise.

Q. What was the second effect of original sin?

A. The second effect of original sin was that God condemned Adam and Eve to eat their bread in the sweat of their brow.

Q. What was the third effect? etc.

The teacher afterward proposes various subquestions, in order to explain each of these effects.

II. *With more advanced pupils*, the teacher may place the subquestions after each of the parts of the answer:

Q. What was the first effect of original sin? What was the terrestrial Paradise? Why is it called a place of delights? Where does tradition place it? Has humanity preserved the remembrance of this abode of happiness?

Q. What was the second effect of original sin? (Subquestions as above.)

III. *With the most advanced pupils*, the teacher might state that though original sin did not destroy in man what essentially constitutes his nature—intelligence, lib-

erty, and other faculties and powers—it wounded them. It annihilated the gratuitous gifts which God had super-added: *Supernatural gifts*—sanctifying grace, the theological virtues, the infused moral virtues, the gifts of the Holy Ghost, and the power of meriting the Beatific Vision. *Extranatural gifts*—science, dominion of the will over the appetites, incorruptibility and immortality of the body. The teacher may develop the answer according to this division.

It is advisable, in teaching catechism to the higher grades, to write on the black-board at the beginning of the lesson a summary of the subject-matter, in the form of a synoptical outline.¹

After the development of each heading, questions are asked; and explanations and exhortations are given when necessary, as in the foregoing specimens.

LESSON ON PURGATORY (for higher grades).

Existence proved. By Scripture, the teaching of the Church, the tradition of the Fathers, and reason.

Pains of the souls. Pain of loss, pain of sense.

Motives for helping the souls. A duty of religion, of justice or gratitude, of charity, of personal interest.

Means of helping the souls. Prayer, fasting, almsdeeds, indulgences, holy sacrifice of the Mass, Communion.

Questions on first heading. What is Purgatory? How do we know of its existence? Cite the words of the Old Testament; the words of our Lord; the words of St. Paul. What does the Church teach about Purgatory? What is the practice of the Church? Has the Church always prayed for the departed? Give the words of St. Gregory of Nyssa. How does reason prove the existence of Purgatory? etc.

¹ The making of such an outline might occasionally be prescribed as home work for the higher grades.

CATECHISM BY EXPLANATION OF WALL ENGRAVINGS (for little children).

It is advantageous to make use of mural engravings with children, principally to give them some ideas on the mysteries.

Catechism on the Blessed Trinity. To impart some idea of the mystery of the Blessed Trinity, the teacher might make use of an engraving representing the *Baptism of Our Lord*. When the children have made the sign of the Cross, and recited the Hail Mary, they may be asked to give their whole attention to the catechism, in order to please Jesus.

Interrogation on persons, places, and actions. The teacher places the picture so that all the pupils may see it easily. After having given them a few moments to examine it in silence, he questions them on the persons, places, and actions, somewhat in the following manner:

Q. What personages do you see at the top of the picture?

A. Angels.

Q. How do you know that they are angels?

A. Because they have wings.

Q. Where have you already seen angels?

A. In the Church, on pictures, on tombs in the cemetery.

The teacher. In pictures and statues, angels are represented with wings, to indicate the rapidity with which they go wherever God sends them.

Q. What should a child do when his parents tell him to do something? What do you think of him to whom the same order has to be repeated several times before he obeys? How can you resemble the angels by obedience?

Q. Are there only angels at the top of the picture?

A. There is also an old person.

Q. Is it a man?

A. No; a man cannot keep himself in the sky.

Q. But, then, what is it?

A. It represents Almighty God.

The teacher. Yes, it is God the Father; He is represented as a venerable old man.

Q. Where does He look?

A. Toward the lower part of the picture.

Q. Whom does He look at?

A. Some one who has gone into the water.

Q. What do you see above this person?

A. There is a dove surrounded by rays.

Q. Have you already seen anywhere a similar dove surrounded by rays?

A. Yes; there is one on the arch of the church.

The teacher. That dove represents the Holy Ghost, who now appears under this form; and the person above whom it flutters is our Lord Jesus Christ, the Son of God the Father.

Q. Are there not other persons also on the engraving?

A. On the right, there is a man holding a cross in his hand, and pouring water on the head of Jesus Christ; on the left are angels looking on.

The teacher. Very good. Observe that in this picture all are occupied with our Lord, who is the principal person. This picture represents the baptism of Jesus Christ by St. John the Baptist.

Q. What more do you see at the foot of the picture?

A. Mountains and a river.

The teacher. That mountainous country is called Judea, of which Jerusalem was the capital; that river is the Jordan.

Q. In what country was our Lord baptized? On the banks of what river was He baptized?

The teacher afterward explains the scene of the baptism of our Lord, the dialogue between St. John and Jesus Christ, the words uttered in Heaven by God the

Father, the apparition of the Holy Ghost in the form of a dove; and especially he puts in a clear light the teaching in view of which he has made use of the engraving, namely, that there are three divine Persons, and that they have intervened in the baptism of Jesus Christ. He simply states afterward that these three persons are one and the same God, and that they constitute the Most Holy Trinity (this expression should be explained).

Oral reproduction. By means of questions the teacher gets the pupils to reproduce the narrative, to indicate on the engraving the personages and incidents; afterward he might ask some of the most intelligent pupils to relate the whole scene thus studied.

Final reflection and practical resolution. The teacher tells the children why our Lord was pleased to be baptized, although He had no fault to wash away, being infinite holiness. But at their birth men's souls are sullied by original sin; Christians are purified from this stain by Baptism: they ought not, therefore, to commit sin which would again sully the purity of their souls. God has received them as His children, and the Holy Ghost has descended on them in an invisible but real manner. The teacher should suggest to the pupils the resolution to avoid grieving God by disobeying Him, and that of making slowly and piously the sign of the Cross, by which we invoke the three Persons of the most Holy Trinity, the Father, the Son, and the Holy Ghost.

CATECHISM IN THE FORM OF STORIES (for young children).

To vary the form of the lessons, the teacher often proceeds by relating Bible stories, from which are drawn instructions and practical consequences. This is the historical method, of which Fénelon said: "One must be very ignorant of religion not to see that it is quite historical. . . . God, who knows the mind of man, has ordained the use of common and ordinary things for

divine service. We also see that instruction was formerly given by means of stories full of natural coloring and animation. These stories are not only suitable to stir up the curiosity of children, but by discovering to them the origin of religion, they lay the foundations of it in their minds."

Catechism on the duties of children toward their parents. To give children seven or eight years old an idea of their duties toward their parents the teacher may relate the history of the *Finding of the Child Jesus in the Temple*, and draw fitting applications therefrom. He divides the lesson into several parts, after each of which he questions; then he gets the pupils to repeat what he has just related.

I. The preparations for the journey, and the journey.

II. The Holy Family assisting in the Temple at the solemnities of the Pasch.

III. The Child Jesus found by His parents among the doctors. (Be particularly careful to make the pupils observe that, by remaining in the Temple, the divine Child did not disobey His parents.)

IV. The Child Jesus at Nazareth: His life of submission, prayer, and labor.

V. Application to the life of the pupil.

The teacher should enter into familiar details, making use of comparisons borrowed from the lives of children, and interesting them by very simple explanations on some of the customs of the Jews in those journeys to Jerusalem; he might speak especially of the interior disposition of the Infant Jesus, of the perfection with which He prayed, obeyed, worked, and how He may be imitated. The teacher can easily deduce from this narration the formula of the diocesan catechism which contains the duties of children toward their parents: *Children should love, respect, obey, and assist their parents in their wants.* He then gets them to repeat this formula until it is thoroughly known.¹

¹ The first seven articles of the Creed may be explained in the form of narrative.

CHAPTER II.

READING.

The teaching of reading comprises two stages: (1) Elementary reading, or teaching children to read words; (2) fluent reading, which, according to the class, will comprise mechanical reading, explanation, and expressive reading.

I.—Faculties and Principles.

Faculties to be developed. Reading requires the attention of the *mind* and of the *eye* to distinguish the different words; it exercises the *hearing* in distinguishing intonations, inflections, cadences, sound, etc.; it forms the *organs of speech* by the emission of these sounds; disciplines the *intellect* by the exercise of thought, and develops the *moral sensibility*.

Principles to be followed. (1) From pedagogical considerations the teaching of reading, writing, and spelling should be carried on simultaneously; (2) lessons in reading and writing should be preceded by simple exercises to familiarize the children with the meaning of such terms as: sound, letter, syllable, chalk, black-board, slate, etc.; (3) the procedure should be slow and methodical; little but well, from the simple to the difficult—such laws must be exactly followed; the letters of the alphabet should be taught in groups determined by analogy of forms, and difficulty of sounds.

II.—Methods of Teaching Elementary Reading.

Reading is necessarily the basis of all instruction; for a child can hardly be put seriously to study until he is able to read fluently. Hence it is important that when a child enters school, he should start at once at the

rudiments of reading. The progress of the pupil will depend, not only on his own intelligence and the pedagogical ability of the teacher, but also on the method employed. Methods of teaching reading have greatly increased in number since the eighteenth century. They may be grouped in two categories: the analytic and the synthetic.

The *analytic* methods have been completely abandoned in many schools. They consisted in going, regressively, from the sentence to words, then to syllables, and finally to letters. In carrying out these methods the children first learned by heart a group of sentences. At the lesson, they recited several times, and slowly, the text memorized, while the teacher pointed out on the chart each word and each syllable. They were afterward exercised in finding out the same words and syllables in other charts, and finally their attention was directed to the letters.

The *synthetic* methods consist in progressing from letters to syllables, from syllables to words, and thence to sentences. They consist of two groups: the *alphabetic* methods (spelling), and the *syllabic* methods (without spelling).

These methods may be grouped as follows:

Methods of Reading	{	Analytic: "Look and say" or word method.		
		{	With Spelling	Alphabetic: the <i>old way</i> of isolating the letters in spelling is disappearing.
				Alphabetic: <i>new way</i> —open vowels and articulations.
		{	Without Spelling	Syllabic: reading of syllables.
				Phonic: syllabication is preceded by articulation and vocal analysis.

Look and say method. The words *look and say* indicate the leading feature of the method. When the pupil meets a word which he is unable to pronounce, he is told to look at it carefully while the teacher sounds it clearly; then still attending to the word, he imitates the sound given until he can reproduce it perfectly. The meaning of the word is given either verbally or pictorially; and finally the child is led to see the parts which compose the word, syllables, and letters. This method is simple, direct, and natural; it associates sound, sign, and idea in a rational way. It is the best way of teaching irregular English monosyllables.

Alphabetic method. In this method the simplest elements of each syllable of every word are first learned, then the syllables are united and the word is read. But what are the *simplest elements* of a syllable? The advocates of the *old* and the *new* ways of carrying out this method differ on this point. The first maintain that the elements are the individual letters, and that they should be pronounced separately. But this is a mistake, since in reading, the letters are not pronounced according to their names, and some letters have several pronunciations. In *should*, for instance, neither the *s* nor the *h*, the *o* nor the *u* is pronounced separately, but the articulation *sh* and the sound *ou*. Again, the names of the letters rarely suggest the sound of the word; e.g., double-you-a-jee, wag. This form of the alphabetic method is losing ground rapidly.

The *new* form is replacing the *old* one everywhere. It distinguishes two elements in a syllable consisting of several letters: the *pure sound* represented by one or more letters (a, o, au, ay, etc.), and the articulation formed by one or more consonants (t, tr, str; b, br; c, ch, cl, etc.). It adopts the following rule: "*Any combination of letters which affects the ear as a distinct elementary sound remains inseparable, and must be read without decomposing it.*"

According to the old spelling and naming, *brimstone*

was read—bee-ar-eye-em-brim, ess-tee-o-en-ee-stone: *brimstone*. According to the new application of this method, *brimstone* is read: br-im, brim, st-one, stone: *brimstone*.

Syllabic method. This method considers the syllables as inseparable wholes which the ear perceives synthetically, as a single sound: *my*, *see*, *crow*. Having chosen a vowel, *o* for instance, and a consonant *l*, the teacher has the syllable *lo* read, without decomposing it. From easy syllables he proceeds to monosyllabic phrases, and even to little narratives; afterward syllables consisting of several letters may be taught: strength, horse, helm; and syllables containing silent letters: comb, though, doubt.

There are several ways of applying this method. Take the word *abnegation* as an example. The child is supposed to know the simple syllables which he has already studied, and should say immediately: *ab-ne-ga-tion* (*shun*). If he hesitates or delays too long over the second syllable, for instance, the teacher directs him thus:

What is the sound of this second vowel? Pupil: *e*.

To what letter is it attached? Pupil: to *n*.

Say it. Pupil: *ne*.

Now read the word. Etc.

Phonic method. This is really a modification of the syllabic method. Before reading syllables, an attempt is made to sound consonants without the aid of a vowel. The pupils are exercised in prolonging the sonorous articulations (*r*, *s*, *f*, *v*), or in disposing the vocal organs for the pronunciation of mute consonants (*b*, *p*, *q*, *t*), until they know how to join them to vowels. The phonic method is rational in so far as it gives distinct sounds to consonants only with the aid of vowels, and prepares for the emission of sounds by a normal disposition of the vocal organs.

The combined method. This method is formed by contributions from the other methods. Anything that is

good in them is brought into it: the *word* method forms the foundation; the *spelling* of the Alphabetic, the *word building* of the Phonic, and the *syllabic* treatment of the Phonetic methods are used. The Phonomimic methods are sometimes employed. Suppose the words *bat*, *hat*, *mat*, and *cat* are to be taught:

1. The teacher draws illustrations of a *bat*, a *hat*, etc., on the black-board; and questions the pupils on them.

2. The word which names each thing represented is *printed* beside it, pronounced by the teacher, and afterward by the pupils, simultaneously and individually.

3. The children may be exercised in pointing out the *word* which is the name of each diagram: *Point out the picture of a mat; the word bat*, etc.

4. Several words are printed on the black-board, among them being the words *hat*, *bat*, etc., and the pupils are asked which are *hat*, etc., and which are not *hat*.

5. Each pupil now builds up these words from the box of letters before him, and afterward writes them, if able to do so. As a preparation for this last exercise, the teacher prints the letters of the word *hat* apart from one another, and again prints them close together. By this analysis the children see the parts of the words. Other words are taught in the same manner: they are then formed into a sentence, which the children read and repeat.¹

III.—The Reading Lesson in the Preparatory Class.

Means of maintaining the attention of pupils. Teaching little children to read is a task full of difficulties. A good method will help to minimize these difficulties, but by itself it will not insure success. The power of con-

¹ For the lower classes a card containing characters large enough to be read by the whole class should be so fixed on the wall that the Master can, by means of a pointer, and without leaving his place, point out the letters, syllables, or words. There should likewise be cards, either portable or fixed, in different corners of the class-room, so as to occupy, under the direction of monitors, those sections to which the Master is not actually giving a lesson.

centration is extremely weak with children, and the first lessons in reading are inevitably monotonous. The teacher should by every legitimate means, but especially by his interesting manner, strive to captivate and maintain the attention of his pupils, if he wishes them to make progress.

1. When the teacher gives a lesson or makes the children read from the black-board, he should indicate the letters, syllables, and words with a pointer. When the pupils have primers, they might point with the finger to the words which one of them reads aloud. If a child is inattentive, the teacher should make him name the letters just taught.

2. When the teacher notices that the class is becoming careless and tired, he should vary the lesson by a written or memory exercise, or even introduce some recreative device bearing on the lesson. For instance, if the pupils be not too numerous, he might distribute among them small pieces of paper, each bearing a letter of the alphabet clearly written. The teacher names a letter, and the pupils having the strips containing it place them on the table in a row; then a second row is similarly formed. Little by little the syllables and words studied in the lesson of the day are formed.

The finished copy-books of all the classes might be usefully employed for the following exercise. Each pupil receives a leaf, and he marks each letter according as it is named: the *a*'s, for instance, are marked by a vertical line, the *b*'s by a horizontal line, etc. The teacher should show on the black-board how the exercise is to be performed. These and similar exercises must be employed for several days, concurrently with writing exercises which are to replace them.

Writing exercises and dictation. It is considered advantageous not only to teach the children the printed and script letters simultaneously, but also to accustom them to write on their paper. After a few preparatory exercises, the children soon acquire the ability to repro-

duce the letters and even the words taught. Doubtless the first attempts will be very imperfect; but with short explanations on the black-board, the teacher soon obtains satisfactory results. Some first reading books contain models of writing after each chapter.

Dictation is an exercise which always interests children and is a useful change during reading lessons. In the beginning only a short time should be devoted to it; three or four letters would be sufficient for the first attempts. The teacher names a letter which the pupils have previously studied, o, for instance; they write it, and at a sign from the teacher, turn their paper toward him. He glances at each, gives a few words of encouragement when deserved, awards marks, and calls out a second letter. Later on, the teacher might dictate syllables and words. In this way the children are initiated into orthography.

All these processes have the same end: to interest the children, to sustain their attention, and to impress on their minds the lesson of the day. As the exercises demand the undivided attention of the learners, they promote discipline, and allow the teacher to give his attention and care to the different sections of the class alternately.

Manner of conducting an elementary reading lesson.

Whatever method be adopted the sequence of exercises may be as follows:

1. Study of the exercises on the black-board.
2. Study of the same exercises in the tablet or book.
3. Exercises in writing, etc.
4. Continuation of the reading, syllabication, and word-building.
5. Writing and dictation—as explained above.¹

¹ Instead of first showing the children a letter or word, and exercising them in pronouncing it correctly, many teachers consider it more logical to pronounce a vowel or whole word, or to articulate a consonant themselves, and to make the pupils repeat this vocal element. Not until the correct pronunciation of the sound is obtained is the graphic representation shown.

The plan of the lesson by the phonic method may be as follows:

First lesson on the black-board. By a word or sign the teacher calls the class to attention. He then points out a letter, which he has written and printed on the board, and makes the children notice its form. He pronounces the letter, showing the vocal organs utilized in the effort. After a few short and simple explanations, he repeats two or three times the same letter and then makes the pupils pronounce it simultaneously. He treats each letter in the same manner.

The letters, written on the board, should be large, the better to strike the child's eye; the mind will thus become concentrated on the special object of the lesson. For this reason the use of the black-board is much recommended.

Suggestions regarding reading in elementary classes.

1. It is very important that pupils should never pass on to a new lesson until the previous ones are thoroughly known. There should be a rapid review each day of the lessons previously studied: such review is necessary for backward pupils, and very advantageous for the others.

2. Simultaneous reading is of a certain utility in infusing life into a class; but much time should not be devoted to it, as it is generally of little value, and leads the pupils to read in a monotonous, distracted manner. It is sometimes employed in a big class; but if it is to produce satisfactory results, the syllables must be sharply and simultaneously enunciated, and the teacher should exact a clear and distinct pronunciation of them, without allowing the exercise to be transformed into screaming or singing.

1. One or two questions are put to the pupils in order to lead them to pronounce a word containing the new sound.

2. This word is divided into syllables, if necessary; and the syllable containing the new sound is decomposed also.

3. Pronunciation of the new sound by the teacher, then by the pupils.

4. The teacher writes the letter on the board, and tells the pupils to observe its form.

5. The pupils write the letter.

6. The letter is combined with characters already studied; and the syllables and words are read from the black-board and the tablets.

3. While giving suitable care to the action of the vocal organs that concur in the proper pronunciation of each syllable, the teacher should correct any indistinctness or faulty pronunciation which he may remark; for this purpose he may even accentuate the faults.

4. Once the children are able to read the words on the tablets, they should give their meanings, and by degrees, aided by the teacher's questions, form simple phrases with these words.

5. There should be few sections in a reading class, so as to avoid as much as possible having recourse to monitors. In the primary classes, the pupils, at the beginning of the year, could be divided into one or two groups, and toward the end into two or three. The first might comprise the children who can read fluently; the second, those not so advanced in the exercise; and the third those who are not able to keep up with the others, or who are but a short time at school. The teacher will often be able to unite the last two sections. The backward pupils could work at the first lessons, and those who have made more progress might go on to the following lessons.

6. Having regard to the many difficulties which a child experiences during the first stages of learning to read, it is advisable to secure the assistance of parents in this task. In large classes it is particularly difficult for a teacher to devote sufficient attention to all the pupils. As each child has a primer containing the same exercises as are in the tablet, it is a good plan to prepare in class a few exercises on the tablet, and to promise a reward to those who, after careful study at home, will read these exercises accurately the next day in school. If the teacher by this means arouses emulation among the children, they will of their own accord, ask their parents to help them; with such aid the pupils will make rapid progress.

7. In view of the correction of dictations, the pupils should practise spelling aloud, giving the alphabetic names to the letters, but not until they can read fluently:

a few simultaneous lessons at the black-board would suffice for this spelling.

Primers and reading charts. The primer is a great aid in teaching reading. It reproduces and completes the lessons of the chart, and insensibly leads the children to read fluently. In the beginning the children should not be given books in ordinary size print. Very large characters are easier to read, and should be used for some time. The books selected to be read concurrently with the grade reader should be attractive and interesting, well printed and freely illustrated. When the pupil passes from the primer to the higher standards, the teacher should redouble his efforts to accustom him *to follow* the reading.

When dealing with chart exercises, there must be sufficient time spent at each before passing on to the following; for the mechanical difficulties of reading are presented in such an order in these exercises that they are dependent on one another; and hence to pass on to a new lesson without knowing thoroughly the preceding ones would complicate the work and retard the progress. But when pupils can read fluently, it is better not to repeat the same passage oftener than twice or three times during the same lesson; otherwise the pupils get to know it in such a way that one word recalls another, and consequently the readers pay but scant attention to their books.

Children who begin exercises in fluent reading are liable to forget the difficulties in pronunciation and articulation. Distinct articulation is the result of careful training. Children imitate easily. The shape of the mouth and the position of the vocal organs should be shown for the pronunciation of certain words occurring in the lesson. Exercises in vocalization should form part of all the reading lessons in the lower divisions. Words and sentences containing the letters *r, s, t, d, dr, th, sh, ing*, should be frequently practised.

IV.—Reading Lessons in the Primary and Lower Grammar Grades.

In the primary grades the greater part of the lesson should be devoted to the reading proper, in order to overcome as far as possible the mechanical difficulties. In the lower grammar great attention must be given to the *material* (words) reading of the lesson, but some time should be devoted to explanations.

The word reading. In primary classes it is useful to begin a reading lesson by an exercise on the black-board. The teacher writes a few words whose pronunciation presents special difficulty; these he explains and divides into syllables, and the pupils pronounce them several times.

The following is another preparatory exercise which may be employed from time to time. One or more sentences of the text to be read having been written beforehand on the board, the teacher indicates the pauses to be made, the words to be emphasized, etc. He underlines certain words, explains them, and questions the pupils on the idea conveyed by the sentence, which he first reads himself and then gets them to repeat.

It is important that the teacher should begin by reading slowly, or having some of the best pupils read, the passage to be dealt with at the lesson. This pattern reading is more beneficial to the majority of the class than numerous observations. Then the teacher should get the pupils to read, sometimes in the order of the desks, sometimes in no definite order; this will keep up the attention of the class.

The teacher ought to insist on the following points:

1. That the pupils avoid precipitation, and pronounce all the syllables distinctly without repeating them.
2. That they read loud enough to be heard by all who follow the lesson.
3. That they avoid a singing tone; and read fluently, naturally, and, as far as possible, in their usual speaking voice.

4. That they observe the punctuation.
5. That they hold their books at a distance of about fourteen inches from the eyes.

To secure these results the teacher should give the children a great deal of practice. During the lesson he must keep a very careful watch over the pupils so as to preserve order and silence; he ought also to have the lesson-book in hand, and correct every mistake made by the reader.

Explanation of the matter read. As soon as children begin to read fluently, mechanical reading should be accompanied with explanations. There is no exercise more indispensable in the teaching of the mother-tongue than the explanation of reading lessons and selected extracts. By this explanation the teacher enters into direct communication with his pupils; he makes them speak, corrects their errors, and enriches their memory by the addition of new ideas; he trains their reason, their judgment, and forms their taste; he awakens and then develops in them a need of clear and correct views; he shows them how to instruct themselves by reflections and personal investigations. It is preëminently the *active lesson* of which it has been said, "a teacher able to explain reading lessons and poems holds his class in his hand." This assertion, though exaggerated, contains a truth which experienced teachers admit; *without frequent and well-prepared explanations of reading lessons and poems, there is no serious teaching of the vernacular.* But it should be remembered that the chief object of a reading lesson in these two divisions, is the actual reading itself. The explanations, though indispensable, are of secondary importance; they should not interrupt nor break up the reading, whether mechanical or expressive, but be given, some before and others after.

Primary classes. In these grades the questions asked should be very simple, and given merely for the sake of exercising the intelligence of the pupils. The following is the general method of procedure:

1. **Model reading by the teacher** (of the text of the lesson, about fifteen lines developing a certain subject). This reading should be done slowly, with good articulation, exact pronunciation, and proper intonation. The various sentiments, the emphatic words, the pauses, and the modulations must be brought out. Pattern reading by the teacher is very important. Good reading being an art, children perfect themselves in it by models.

2. **Short explanation of the passage.** It consists in getting pupils to find out the subject of the lesson. They are questioned on the characters, their words and actions, on the places, the views, and the objects described, in order to ascertain whether they understand what they are going to read.¹

3. **Reading by the pupils**, simultaneously, afterward individually. The passage is read sentence by sentence or paragraph by paragraph. *This exercise should take up the greatest portion of the lesson.*

If the children read too quickly or without harmony, the master might guide them by his voice, and if necessary by a tap of the pencil or signal on the table. If they read with a singing tone, he should stop them and make them take a natural tone. If, in simultaneous reading, a sentence has been badly read, one of the best readers might be called on to read it. In individual reading the teacher should stop the child who has made a mistake, in order to correct the word or words which he mispronounced. If he repeats the mistakes a companion may be asked to correct him. If two or three pupils fail to read the passage correctly, the teacher himself should read it.

4. **Exercise in the pronunciation and articulation** of certain difficult words.

¹ The following is a useful exercise for the primary classes of reading. The teacher questions thus: "Read the words that tell the name of the person in that sentence; the words that tell his age; . . . that tell whether he obeyed his mother. Read the passage that describes the lion's appearance; the sentence that tells how the hunter escaped," etc. This kind of questioning will be effective in bringing out the meaning of the passage, and opening the pupils' minds.

5. Language training exercises. Socratic questions on the meaning of a few words. These words should then be put into a sentence by the child. The lesson might end by an *oral summary* given by two or three pupils. The teacher should indicate the moral idea which naturally arises out of the lesson.

Specimen explanation of a text. On a very warm summer day, Willie went into the country. He walked so fast that he became very hot and thirsty. Suddenly he came to a spring, gushing like a silver stream from a rock under the shade of an oak. He rushed to the water. It was as cold as ice. But hardly had he begun to drink, when he almost lost consciousness. He went home sick and feverish. "Ah!" he sighed, "I would never have believed that a clear spring could make me feel so bad!" His father answered: "It is not the spring which is the cause of your sickness, for its water is pure and wholesome; it is your imprudence and haste in satisfying your thirst."

The following questions may be put on this text:

The general idea. What is spoken of in this lesson? What did Willie do?

The secondary ideas. Where was Willie? How did he feel after walking? How did he satisfy his thirst? Wherein was he imprudent? What was the result of his imprudence, etc.?

Explanation of words. Spring, shade, oak, gushing, consciousness, limpid water, thread of silver, the water was pure and wholesome.

Questions on spelling and grammar. Indication of the qualifying adjectives of the first six lines, and the word which each of them qualifies; if the pupils know only nouns, they should be made to indicate those contained in such and such a paragraph. The book being closed, a few words are spelled.

To save time and avoid rote questioning, the teacher should mark upon the margin of his class-book or on a separate slip of paper, the principal and secondary ideas in each paragraph of the reading lesson. The words to be explained might be underlined.

Practical lesson. The class should be made to discover the hygienic prescription: "Do not drink cold water when you are perspiring."

The explanation may be followed by a written exercise in grammar or spelling.

Lower grammar grades. The teaching of reading in the lower grammar grades should have for object:

1. To train the pupils to read fluently and without hesitation, and to bring out the principal sentiments by expression.

2. To enrich their vocabulary.

3. To extend their knowledge by precise and varied explanations.

The following is the mode of procedure:

Preparation. For a few minutes the pupils read in silence the text of the lesson. They mark the words which they do not understand, in order to ask an explanation. Finally, as far as they have been taught, they take note of the important words, in order to emphasize them.

1. **Pattern reading** by the teacher, afterward by the best readers.

2. **Explanation.** (*a*) Research of the general idea, "Of what does this lesson treat?" (*b*) Short examination of the secondary ideas, by questions following each other in a logical order, prepared by the teacher before the lesson. (*c*) Explanation of the words marked by the pupils, and those pointed out by the teacher.

3. **Reading of the text** by the pupils. If words or phrases be badly read, the teacher should have them repeated by the same or by other pupils until they can be gone through without a mistake.

4. **Expressive reading**

5. **Oral summary** by the pupils who are capable of this work—paragraph by paragraph at first, and then of the

whole text. The teacher should deduce the moral lesson contained in the text.

Reading books have, as a rule, some chapters devoted to religious subjects; teachers might make use of these for the moral training of the children. Without altering the exercise or transforming it into a lesson in religious instruction, a teacher can, by an appropriate remark or allusion, instil Christian ideas and pious thoughts into young hearts. The books also contain some interesting chapters on natural science, industries, recent inventions and discoveries, historical facts, etc., all of which would be, if properly treated, subjects for instructive lessons.

V.—Reading in the Higher Grammar Grades.

In this division the chief object of reading is to cultivate the intelligence of the pupils, and to enrich their minds with useful information. The time and explanation which this demands should not prevent great attention being given to the reading itself.

The actual reading. It will take much time, trouble, and exercise before pupils acquire the ability to read in the proper tone of voice; to banish all precipitation, which leads to repetitions, stammering, and senseless reading; to mark the rhetorical pauses; to vary the intonations and inflections according to the sentiments—that is, to read with *expression*.

The principal aim of the lesson is the reading itself. But since the pupils can read fluently, the attention of the teacher should bear especially on three points: the correction of the mispronunciations, the rapidity of the reading, and expression. The pupils must acquire the habit of reading mentally several words in advance, and of pronouncing distinctly and quickly. To develop this habit, pupils might receive, individually and collectively, progressive exercises in speed. These exercises constitute a sort of impulse to read quickly, without injuring the purity and distinctness of articulation. In

this division expressive reading and mechanical reading should not be treated separately, as in the lower grammar grades. The pupils must from the start give a suitable tone to their reading. The teacher should not rest satisfied with directing them generally on the method of employing the modulations in harmony with the ideas and sentiments, but explain the principal rules of the art of reading.

Method of conducting the lesson. Preparation. The teacher having indicated on the evening before, the text of the lesson for the following day, the pupils might be told to mark the words they want to have explained, and to find out the way of expressing the sentiments contained in it. On his part the teacher should study the lesson, and prepare a plan of the subject, the ideas, and the words, and mark the pauses and intonations required for expressive reading. This preparation on the part of the teacher is indispensable.

1. **Expressive reading** by the teacher and then by the best readers. The teacher might praise and criticise as he considers proper, and then have badly read passages gone through again. The important thing is not to have many pages read during the lesson, but to have a few very well read. At each stanza or at each phrase, according to the nature of the text, the teacher explains why he took such an intonation or varied the inflection, accented some words, made such a pause, quickened or slackened the rate, swelled or diminished the volume of voice. He shows how to render exclamations, interrogations, irony, and doubt; how to modulate the voice in order to connect properly the different parts of a sentence—incidental phrases and inversions.¹

¹ The teacher should consult special works on *expressive reading* and *elocution*, where he will find these points fully explained.

Reading Latin. In the upper grammar grades, the pupils who know how to read English sufficiently well may be taught to read Latin. The teacher should give them hints on the method of pronouncing the liturgical Latin, and direct them to attend to the pauses indicated by the punctuation signs.

2. **Individual reading** by as many pupils as possible. The teacher should attend to the proper accenting of words, to the emphasis required, and to the important propositions, as well as to the speed suitable for the piece.

3. **Short explanation** of the text by the pupils. By means of Socratic questions the teacher might direct them in finding out the general and the secondary ideas. The words marked by the pupils should be explained if possible by their companions. The teacher might explain other words if he judges it necessary; and then ask a few questions on spelling, the grammatical function of such and such a proposition, the etymology of a word, etc.

4. **Oral summary**, correct expression, and the logical order of ideas should be insisted on, and the moral lesson deduced.

After the pattern reading the teacher may conduct the explanation in the following order:

1. **Plan of the text** { Characters and place of the scene.
Words and actions.
Conclusion.

2. **Questions on the ideas.** Principal and secondary.

3. **Historical and grammatical** explanations if required.

4. **Literary explanations.** Questions on characteristic words and expressions.

5. Observations on the particular style of the author.

6. Deduction of the moral idea of the passage.

It is strongly recommended that the pupils of the higher grammar grades be made to prepare a written,

analytical summary of certain lessons. This may be done in the following way:

Name of lesson.....

Leading idea.....

Principal Ideas.

Secondary Ideas.

1.	{	1. 2. 3.
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2.	{	1. 2. 3.
---------	---	-------------------------------

3.	{	1. 2. 3.
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Conclusion.....

This exercise may be written on the left-hand page of the exercise book; the right should be reserved for the corrections made by the pupil during the class criticism.

CHAPTER III.

WRITING.

I.—Faculties and Principles.

Faculties to be developed. Like drawing, writing calls into play and trains the sense of *sight* and *skill of fingers* as well as the *attention*, the *imagination*, the *reasoning*, and the *æsthetic sense*.

Principles to be followed. (1) From the beginning great attention should be paid to the position of the body, and of the copy, and to the method of holding the pen. (2) The teaching of writing should be (a) intelligent and rational: exercises to be easy, slowly progressive, and based on recognized principles; (b) practical: conducing to a rapid, legible style; (c) an aid to æsthetics, by developing the pupil's sense of the beautiful: good writing must have unity, variety, order, symmetry, proportion, and harmony. (3) The writing should be thoroughly corrected.

II.—Directions for Teaching Writing.

The end to be attained and general means. The chief object of exercises in writing is to make the pupils acquire gradually a legible, bold, and graceful style of penmanship.

To obtain this result the teacher must be methodical in his instruction; he must be thoroughly acquainted with the principles of writing; and explain them on the black-board; he should correct carefully and regularly the work done by the pupils, and pay great attention to their posture and the manner in which they hold the pen. The children should always do their writing to the best of their ability, not only in their *writing* copybooks, but in their exercises of orthography, written tasks, and arithmetic; otherwise they would lose at one time what they

had acquired at another, and make little or no progress. This is easily seen in schools where the teachers attach little importance to the writing of the exercises given in class or as home work. A child, when left to himself, makes the letters irregularly and fantastically, and thus acquires the habit of defective penmanship.

Method and processes of teaching writing. By method is here meant the series of exercises which the pupil is put through in order to attain legibility and speed in writing.

A good method of writing should:

1. Present models introducing the difficulties gradually.
2. Be sufficiently varied to keep up the interest of pupils, even though they are kept for several days at the same exercises.
3. Not go from one letter to another without presenting many intermediate exercises, to make the advance possible to the majority of the class.
4. Be of such a character as to render explanations and corrections easy for the teacher.
5. Be legible and easy of execution.
6. Afford, at intervals, recapitulatory exercises.

Concurrently with the explanations of the rules and principles of writing on the black-board—which explanations are indispensable—three processes are employed in teaching writing: written or engraved models printed on slips of paper or cardboard, the tracing plan, and engraved head-lines written in books.

Cardboard models. The first process consists in placing before the pupils slips of cardboard containing the model which the teacher explained on the black-board at the beginning of the lesson; this is reproduced on paper, having regard to the size of the writing; the teacher examines the attempts made, and points out where they are defective. The use of these model slips allows the teacher to keep the children at the same writing lesson as long as he deems it useful; besides, this process checks

the tendency children naturally have of going to the end of a book as fast as possible—this tendency is especially prejudicial to beginners. In the lower grammar grades it would be well to have the paper ruled into spaces to indicate the height and width of the letters.

Tracing plan. This process consists in giving the child a book or slip of paper containing a head-line in bold type, and also a leaf of thin transparent paper. This he places over the head-line, and with a pen or pencil traces the letters as they appear through the transparent leaf. Sometimes the head-line is traced in the copybook in faint or colored ink, and the pupil is required to go over it with a pen and black ink, until he has gained sufficient mastery over the movements and the necessary power of observation to proceed as in the first process described. Some series of writing books have every second line traced: when the pupil has gone over the tracing, he reproduces the same exercise without such aid. When employed by a teacher who is persevering, and who explains carefully the principles on the black-board, the tracing plan gives excellent results. It is particularly useful in improving defective writing.¹

Engraved head-line books. These copybooks have an engraved head-line at the top of each page, and sometimes one in the middle, and a tracing sufficient to make the imitation easy. By degrees these tracings become less and less complete, so that eventually the pupils find themselves compelled to make a copy of the head-line without any artificial help whatsoever. This process unites the advantages of the two others, and being considered the simplest for beginners, it has been generally adopted in schools. However it does not do away with the necessity of explaining the principles on the black-board. The teacher must watch carefully that the chil-

¹ This process is an old one. Quintilian (35-96) and St. Jerome (A.D. 329) recommended it; Locke (1632-1704) described it in his *Thoughts Concerning Education*. Many modern series of copybooks rightly make use of it in the early stages.

dren do not rush *to fill the page*, without applying themselves to the writing.

When a pupil has finished a head-line copybook, the teacher should examine it carefully; and if the application and imitation do not merit the note *very good* or *good*, he ought not to allow the pupil to proceed to a more advanced copy: the pupil should write head-lines of the same kind, until he attains the standard mentioned above. He might be made to reproduce carefully the head-lines of the finished copybook in a blank exercise book.

The senior division should frequently get as an exercise in penmanship the neat transcribing of memorandums, invoices, bills, and bill-heads, etc.; such exercises will accustom them to make figures properly, and will develop their taste.

Writing in the primary classes. To obtain good results in penmanship, the teacher should pay special attention to the beginners; if he does not, these pupils will contract defective habits of writing, which it will be almost impossible to correct afterward. The writing *lesson* ought to be given to all the pupils at the same time, to allow the teacher to exercise effective supervision, to see that they sit properly, and hold the pen as directed. It would be an abuse of the advantages which head-line copies offer, if one section were at writing while another was at reading.

Use of slates. Writing on slates has been recommended for very young children, as an exercise in connection with elementary reading. But there are certain preliminaries requiring the teacher's attention for the successful use of slates: the pupil must place his slate in front of him, as he would a copybook, and hold his pencil as he would a pen. If the pencil is well pointed, and the pupil does not press too much on it, he will not get into the habit of writing heavily; he will have been prepared for writing on paper, and the disadvan-

tages which may arise from slate work will be avoided. When the pencil is short, it should be put in a pencil-holder, which is as necessary under these circumstances as a pen-holder is for the nib. A short pencil causes the pupil to acquire a cramped style of writing.

Figures. Young pupils must practise forming figures. The figures should be decomposed into their elements, and the parts traced neatly and proportionately. All the figures, including seven and nine, must be of the same height and breadth, as in the printed book. The last line of every page of the copy could be reserved for this exercise. The pupils should form their figures well during the arithmetic lesson.

III.—General Principles of Writing.

Position of the body and arms. 1. The body should be almost erect, slightly nearer the desk on the left, but without touching it. The legs must not be crossed, nor thrown back beneath the seat; the two feet should rest on the floor, the left a little forward. The teacher should not tolerate the habit which nearly all children have of sitting carelessly and *in a bent* posture; nor allow them to lean over their work, as this tends to injure the chest and eyes.

2. The left forearm should be laid wholly and almost horizontally on the table with the fingers on the paper, to move it when needed.

3. The right forearm should rest on the edge of the table, with the elbow about three or four inches distant from the body; the wrist should be laid almost flat, and the hand so placed that the pen-holder points toward the shoulder.

4. The head should not be bent over the work more than is necessary.

Position of the copybook and pen. 1. The copybook should be so placed that the lower edge will be almost at

right angles with the direction of the right forearm, or that the direction of slope be nearly perpendicular to the edge of the desk.

2. The pen should be held without effort or strain by the first fingers of the hand. The thumb and middle finger support the pen and guide it; the index finger leans more or less heavily on the pen to produce the body strokes. The third and fourth fingers are kept bent, in order to give the other three greater ease and freedom.

3. The two points of the pen must touch the paper. Beginners often find this difficult.

The teacher ought to question the children occasionally on the rules relative to the position of the body, copy, and pen; and be careful to see that they do not contract any injurious habits by the violation of these rules.¹

Remark. Before allowing very young children to use copybooks, it would be a help to them to place in their fingers a small stick about the thickness of a pen-holder, on which are three grooves, marking the position of the fingers. They might also be taught to assume a good posture, and to make with ease all the movements necessary for graceful penmanship.

Regularity in the height and slope of the writing. 1. A guide to the correct slant of writing can be obtained by dividing the upper side of a square into four or five equal parts, and joining to the lower left angle the third or fourth point of division.

2. That which makes penmanship perfect is the graceful shaping of the letters, the firmness of the thick strokes, the uniformity of the slope, the regularity of the height, and of the distance between letters of the same nature—loops, strokes, etc.

¹ If the children are allowed occasionally to write on the black-board a great deal of cramped writing might easily be avoided.

IV.—The Writing Lesson.

A writing lesson in its entirety comprises: the oral explanation of the principles and initiatory combinations by the teacher, the application of these principles by the pupils, and the correction of the writing.

Explanation of the principles by the teacher. Whether the head-line copybooks are made use of or not, the oral explanation on the black-board should never be omitted; it may be conducted in the following manner:

1. Questions put to the pupils on the proper position of the body, copybook, and pen.
2. Large tracing of the letter to be written.
3. Analysis of the letter, that is: separate tracing of the component parts (loops, parallels, joinings, curves); indication of the height, breadth, slope, and joinings; relation between the letter and the form from which it is derived.
4. Writing words where this letter is found with others already studied.

For beginners the plan of the lesson is more elementary. The letters to be explained are merely written on the black-board. Then a very simple explanation is given on their form, after which the pupils begin to write in their books.

Principles of Writing.

Observations. 1. Capital and looped letters should be of the same height.

2. The space between the lines should be generally four times the size of the writing.

3. The loops should begin at a distance of twice the thickness of the downstrokes above the body of the writing.

4. The width of the loops of f, l, ought to be equal to that of n, which also ought to be the *minimum distance between the words*.

5. The smaller and lighter the writing, the longer proportionately should be the loops.

Notes of a writing lesson on the letters o, c, e. 1. The teacher questions on the position of the body, of the copy-book, the holding of the pen. . . . The pupils take their pens between the thumb and middle finger; then they lower the index and go through in the air the normal movements for writing.

2. Preparatory exercises gone through, while counting, to give boldness to the stroke of the pen.

3. Tracing on the black-board of a large O, about two inches high; having the letter this height will help to show more easily its different parts.

4. Tracing of the separate elements of the o: the left hair stroke, the first curve with an increasing thickness; the second curve, and the right hair stroke—each element should be traced separately.

5. After this analysis, new tracing of the letter by a slow and continuous movement.

6. A few questions on the manner of tracing the letter o.

7. The pupils now copy these various exercises.

8. The teacher writes and gets the pupils to copy two or three words in which the letter o is combined with letters already studied.

9. The analysis of the letters c and e should be gone through in the same manner, the teacher showing how these letters are derived from the o.

Application of the principles by the pupils. After the principles relative to a letter have been explained on the black-board, the pupils apply them in the following manner:

1. Two or three pupils come out together to the black-board to write the letter. Their companions point out the faults in the writing, and the teacher has it rewritten.

2. All the pupils reproduce on paper the letter or element thus studied, and they recommence it again and

again as long as the letter is badly made by the majority of the class; this is the first portion of the lesson.

3. The second portion is devoted to writing on paper words which contain the letters already studied. These may be taken from a head-line copybook, or the teacher may write some on the black-board, and have them reproduced on paper. The teacher should see that the pupils go through their writing to the best of their ability, working slowly and neatly.

Correcting the writing. The aim in correcting the writing of the pupils is to make them acquire a good style of penmanship, by pointing out and getting rid of the most striking errors.

Characteristics of good writing. The characteristics of good writing are: legibility, symmetry, and elegance. These depend on numerous conditions. The following are the chief among them:

1. Beauty in the form of the letters.
2. Regularity in the height of the writing.
3. Evenness, neatness, and steadiness of the down-strokes.
4. Regularity in the slope of the letters.
5. Fineness of the connections.
6. Sufficient and uniform distance between the words, and between the letters of the same word.
7. Ease and firmness of the stroke of the pen.
8. Simplicity, which rejects fantastic flourishes.

Chief defects in writing and their causes. Nearly all the defects noticeable in penmanship are due to the bad position of the body, and the manner of holding the pen. The following are some of these defects and their ordinary causes:

Defects.	Ordinary Causes.
Writing too slant	{ Right arm too near the body.
	{ Thumb too stiff.
	{ Point of nib too far away from the fingers.

Defects.	Ordinary Causes.
Writing too straight	{ Right arm too far away from the body. Fingers too near the nib. Index finger alone guiding the pen.
Writing too heavy	{ Index finger leaning too heavily on the pen. Using a worn pen. Pen-holder of too small diameter.
Writing too light	{ Pen held too obliquely or too straight. Index finger not pressing sufficiently. Pen-holder of too large diameter.
Writing too angular	{ Thumb too stiff. Pen-holder too lightly held.
Writing irregular	{ Incorrect and uncomfortable position of the body. Fingers cramped. Movements of hand too slow. Stiffness in holding pen.

Way of correcting writing. During the writing lesson the teacher should pay great attention to the posture of the pupils, and also to the manner in which they execute the movements of the fingers and hand. Writing can be corrected either individually or collectively.

Individual correction. Individual corrections may be made either during or after class. When the lesson given on the black-board refers to a special letter or group of letters, the pupils will understand the simplest signs made on their copies in connection with the principles explained.

If the letters are not in a straight line and even, the

teacher draws a horizontal line, to indicate the course the pupil should have followed; if they are not of the same height, he draws two parallel horizontal lines, the distance between which will mark the uniformity the pupils should have given to those letters; if they have different inclinations, or if the strokes are not straight, he draws parallel lines close to the letters, indicating the slope they ought to have taken; if they are too far apart or too crowded, he draws strokes of the pen at the right distance the pupils should have observed; finally, if two letters are badly placed or ill connected, he writes those letters to show how they should be made. To correct a junction badly made, he might write the proper form above it. He proceeds in the same way to correct a badly formed letter, or else he may write it in the space between the lines.

It is a bad plan to point out more than two or three faults at a time; a greater number would distract the child's attention, and confuse him. It is therefore wise to follow up the same fault until it has almost disappeared, above all if it bear on an important point. In proceeding thus, with care and perseverance, the teacher can scarcely fail to secure the application of the pupils and accelerate their progress.

Collective correction. The collective process of correcting is more rapid and more effective than the individual. When, during the individual correction, the teacher observes that the same fault occurs in several books, he should point out the mistakes, by reproducing them on the black-board. He asks a pupil to repeat the principle relative to the formation of the letter in question; corrects the defective tracing, and writes it again as it should be; he then calls a child to the board, and gets him to write it.

Experience shows that, in order to correct the writing of the pupils, a teacher has no surer means than the exemplification in his own handwriting of the principles he has explained. Children will then have taste for cal-

ligraphy, and will endeavor to reproduce the special elegant characteristics which they admire in the writing of the teacher.

The mutual-simultaneous process of correcting. A teacher who has much authority, and whose pupils are of the same grade, might adopt the following method. He might place the most advanced pupil between the two most backward; the second best between the two next, and so on with the others; he might personally instruct the medium writers, and, without leaving his place, correct the others in the manner already indicated. The best pupils write a line on the page of each of those placed under their care, and, while the latter are imitating it, they themselves write in their own copybooks. Toward the middle of the lesson they might inspect the work of their fellow-pupils, point out the defects, and write another line in their copybooks. The teacher, toward the close of the exercise, should call the pupils in groups of three, examine the work done, correct the copybook of the monitor, and reward him according to the progress made by his pupils.

This method, which is suitable for small schools, has many advantages. The bad writers receive great assistance, and make rapid progress by reason of the lines written on their copybooks and by the numerous corrections made. The teacher can devote his time almost entirely to the medium writers of the class. The best pupils, being called upon to teach, are obliged to become familiar with the principles of writing, and easily perfect themselves in the elementary forms.

General Remarks.

A good teacher, who has at heart the advancement of his pupils, shall not only be very exact in requiring them to follow the regulations as to writing given in the preceding articles, but he will be convinced that the neatness and good preservation of the copybooks and exercise

books contribute very much to the progress of the pupils and the good reputation of our schools, and he shall therefore insist upon the following:

1. That all the copybooks be clean and neat, and not crumpled or bent at the corners.

2. That the pages be well filled and none of the leaves spoiled.

3. That the margins of the paper be left uniform, and not too wide.

4. That they neither tear nor skip any page, not even the first, and that they leave none unfinished.

5. That they be careful to put their names and the date of the month on each page.

6. That they write only what is given as a model, and that they strive to imitate it exactly.

7. That they neither flourish nor write on the top of their copies, with hand off the paper, until they shall have learned to write a rapid and neat business hand.

8. That, in writing, they follow carefully the character of letters prepared for each grade, and that the leaves be so turned that the reverse side may be written on to the edge of the paper.

9. That each one has a sheet of paper to put under his copybook while writing, and a cover in which to place it when the writing lesson is ended.

The exercises should always bear the date of the day on which they are written.

V.—Book-keeping, Shorthand, Typewriting.¹

Importance. Book-keeping, as a school subject, affords the pupils practice in penmanship; accustoms them to manipulate rule, pencil, and pen; and makes them acquire habits of order and neatness.

Programme and method. The first lessons in book-keeping consist of private transactions: workmen's ac-

¹The teacher should consult special works on book-keeping, shorthand, and typewriting, for full information on the theory and practice of these subjects.

counts, different purchases, cash payments, etc. Commercial book-keeping may be afterward introduced.

To keep accounts properly, the book-keeping must be very neat in ruling and writing, and exact in all details. The items dictated to the pupils should be of a practical kind; such as the receipts and expenses of a household, of pupils, etc. At the first two or three lessons, all the work is to be done on the black-board: the teacher writing the items suggested by the pupils, *journalizing* them on another board, and *posting* on a third. After a few lessons the pupils will become familiar with the method of keeping accounts. They must always attend to neatness in writing, ruling, and making figures. The teacher explains *goods*, accounts, and after *cash* and *personal* accounts. All goods are at first bought and sold for cash. Afterward promissory notes, etc., may be substituted for cash. The pupils should be made to take an active part in this work.

Shorthand : utility. The study of a good system of shorthand is a valuable mental discipline. It strengthens attention, exercises the memory, stimulates and develops thought and persevering effort. It trains the pupil in accuracy and fluency of expression, and increases his vocabulary. Besides, it is found a great aid in the acquisition of other branches of instruction. A practical knowledge of shorthand greatly facilitates the teacher's work. In preparing notes of lessons, in reading and in study, the teacher who uses shorthand can quickly jot down summaries, extracts, illustrations, etc. During the lessons he can by a few marks on the black-board or on a slip of paper make notes of mistakes, difficult points, hints, remarks, etc., without any notable interruption. The happy thoughts that flash on the mind at any time may similarly be noted down for future use in teaching.

Remarks on teaching. 1. The teacher must know the system thoroughly. He need not be able to write at very great speed; but it would discourage pupils to see him hesitate much.

2. The first lessons should be short. The symbols must be so thoroughly mastered that the pupils can write them as readily and accurately as they write the digits.

3. Pupils must be shown their mistakes from the beginning. Heavy, awkward, cramped, and other bad styles are perceptible in the first strokes written; and the teacher must patiently and constantly direct the pupils in the right way.

4. The teacher's motto should be: *little and thorough*. At first, a short lesson (ten minutes) every day is better than one weekly lesson of an hour.

5. The black-board should be used frequently. The pupils should always write on paper, never on slates.

6. Dictation should be given at every lesson; the teacher writing on the black-board while dictating.

7. The pupils must read aloud what they have written. The teacher should attach *more* importance to fluent reading than to writing.

8. The pupils should frequently transcribe their shorthand into longhand.

9. A mistake may be indicated by drawing a circle around it.

10. The exercise books should be changed for correction. This accustoms pupils to different styles and to the criticism of their comrades.

11. The pupils of a class must be kept together. A class is apt to break up into sections very soon in learning shorthand; and then the instruction drops into the individual method—the teacher going from pupil to pupil, making a remark here and a correction there. Quick pupils should first do the class lesson; they may then be allowed to do the next exercise instead of idly waiting for the others.

12. The teacher must always insist on neatness and accuracy. Speed may be attained by practice; but speed in making marks that the writer cannot read fluently is worse than waste of time.

A First Lesson (ten minutes).

1. Teacher writes four or five characters and their names on the black-board, and directs the attention of pupils to the required slope, length, etc.

2. Pupils copy them in their books.

3. Teacher writes each of the characters several times, naming them while doing so, and tells the pupils to write them similarly in their books.

4. While the pupils are writing, the teacher inspects their work and makes remarks to direct them; "too long, too heavy, good, wrong slope, look at the black-board," etc.

5. Teacher writes the characters several times in any order on the black-board, the pupils calling out the names as he writes.

6. Pupils called on singly to read from the black-board as the teacher points.

7. Teacher dictates the characters, and writes on a black-board from which the pupils cannot copy.

8. Teacher turns black-board to class; gets pupils to read from their books; sees whether pupils read what they have written, and whether this is what was dictated.

Much book-work done by pupils alone is dull and wearisome. When pupils are familiar with the elementary part of the subject, and are using text-books, lessons may be given somewhat on the following plan:

1. Reading, explanation, and illustration of a rule, using other words than those of the text-book.

2. Dictation of illustrative words; teacher writing them on black-board while dictating.

3. Reading aloud by pupils, and correction.

4. Dictation of exercise on rule; teacher writing on black-board. Change of exercise books, and correction from black-board.

5. Reading by several pupils of their corrected exercise; and reading from random pointing on black-board.

6. Transcription of exercise (or part) into longhand.

With advanced pupils the lesson may consist mainly of the dictation, reading, and transcription of letters, speeches, sermons, etc. Unusual words and phrases in the dictation may first be written on the black-board; the teacher may also write suitable contractions for certain words. These words and phrases are effaced before beginning the dictation. Advanced pupils should be encouraged to use shorthand freely in their other school-work.

Typewriting. The teacher should thoroughly know the construction and working of the machine used in his school.

Pupils should systematically master the key-board before being allowed to do any copying, and use at least three fingers of each hand. The practice work ought to be as varied as possible: prose, verse, lists of names, figures, bills, letters, dialogues. Examination lists, papers, etc., for use in the school, may be made by manifolding and duplicating processes.

CHAPTER IV.

LANGUAGE.

I.—Faculties and Principles.

Faculties to be developed. Language comprises two essential elements: *thought*, and its reproduction, which is *expression*. Thinking is the active, complete, and simultaneous exercise of all the faculties. Speaking presupposes ideas which the mind receives through the *senses*, *conscience*, and *reason*. The *judgment* compares these ideas among themselves or with others furnished by *memory* and colored by the *imagination*. Finally *reason* connects the different propositions so as to form a logical whole. But since the soul is one, the thoughts

which fill the mind must react on the *sensibility*. Now *conscience* acts, and the *will* determines the course of action. Thus language exercises a complete and continuous influence on all the powers of the soul.

Principles to be followed. (1) Instruction in language must act on the intelligence, and teach how to think; (2) by it the pupils must acquire a knowledge of words and forms of expression; (3) all the school subjects ought to be utilized as aids to language; (4) the teachings should be moral—examples in grammar, poems to be memorized, head-lines, should all tend to give a love for the true, the beautiful, and the good.

Elementary instruction in one's own language consists of exercises in the spoken or general language, and in the written language. The first are exercises in speaking; the second are grammar and grammatical exercises, orthography, composition, and the study of selected texts.

II.—Exercises in Language and Vocabulary.

Their nature and object. By exercises in language a child is trained to speak with ease and correctness. This correctness and facility depend on the early home training, and on the extent of the vocabulary at the child's command. The teacher should endeavor to increase the number of *words* familiar to the child, and at the same time the *ideas* which these words represent. Two means might be employed for this purpose: to make the pupils speak as much and as carefully as possible, and to give them special exercises in words and their meanings.

First means. To make the pupils speak often and well in class, the teacher should take care to question frequently during the lessons, and not accept monosyllabic or incomplete answers; to encourage them to express themselves in complete and connected sentences; to reprove them gently in order to correct too much hurry, or hesitation in language, faults in pronunciation,

incorrect expressions, or wearisome repetitions of words or phrases.

The principal school exercises by which children are trained to the correct use of language are: Socratic and examination questions; oral exercises in grammar and lexicology; oral summaries of the reading lessons; object lessons; oral preparation for composition—the description of an object, a scene, the narration of a tale, etc.

Object lessons. Object lessons and exercises in language training mutually help and complete each other. Object lessons help in composition by habituating the pupils to express themselves correctly, which will lead them to write correctly; by showing them how, in a given subject, the ideas relating thereto may be logically connected; and by furnishing them with matter for composition.

The following language training lesson on *wood* may be taken as a type of exercise suitable for young pupils.

1. Ask for the names of objects in school, home, and church, which are made of wood: tables, desks, windows, cupboards, beams, floors, beds, chairs, pews, pulpits, etc.

2. Ask for the chief kinds of wood used to make these objects: oak, pine, walnut, etc.

3. Ask for the classes of workmen who make cupboards, doors, chairs, etc.

4. Ask for the names of chief instruments they use: hammers, saws, chisels, etc.

Material to get ready: specimens of wood in order that the children may compare weight, color, veins, etc.

Exercises: write on the board the names of trees, objects, and implements, etc., and have them copied.

Second means: special exercises on words. These oral exercises should be adapted to the intellectual development of the pupils, and may take any of the following forms:

1. To make a child say the name of an object and of all its different parts, either by showing it to him, or

recalling it to his memory: school furniture, dwellings, etc.

2. To make him enumerate a series of objects or beings of the same species: animals, quadrupeds, birds, plants, virtues, defects, etc.

3. To make him enumerate a certain number of adjectives applicable to food, color, virtue, etc.; the nouns or the verbs relating to language, to motion, or to handicrafts, etc.

4. To substitute for a word its equivalent, its contrary, a phrase or clause, etc., and employ each in a sentence.

5. To complete a sentence some of the parts of which are omitted.

6. To have added to a word one or several epithets which suit it.

7. To have the nature and the use of familiar objects stated.

8. To have certain words explained and defined: to have the difference between expressions pointed out.

9. To have different forms given to a sentence, and to have it begun successively by given words.

10. To have expressions, proverbs, etc., explained.

These various exercises should not be limited to the mere seeking for *words*; the children must be questioned on the *ideas* of which these words are only the outward signs.

The following language training lesson on the word *care*, its roots and derivatives, is suitable for a senior class:

To find the family of a word is to find the simple and compound derivatives of that word.

Root. Cura = care, cure. The *dominant idea* in the words of this family is that of care and attention; the *secondary idea* in many of them is the getting or the avoiding of care.

Derivatives. (a) With suffix; curacy, curator, curatives, curious, careless, curable, careful, curate.

- (b) With prefix; secure, sinecure, procure.
- (c) With prefix and suffix; accurate, incurious, procurator, incurable.
- (d) With double affixes; insecure, carefully, carelessness.
- (e) Compound words; careworn, care-taking.

Oral exercises. Sentences should be constructed in which these words are appropriately used.

Written exercise. Sentences to be composed on each of the words: curacy, procurator, inaccurate, careless.

III.—Grammar.

The study of grammar leads to a knowledge of the rules of composition. The chief exercises connected with it are analysis and the conjugation of verbs, and synthesis.

The grammar lesson. A grammar lesson might be generally given on the following lines:

1. Recapitulation of the preceding lesson by means of questions.
2. The explanation of a grammatical definition or of a rule in syntax, the definition or rule being generally deduced from a variety of examples.
3. Orally making sentences in which the rules are applied, and finding examples of the rule in the reading books.
4. The pointing out of an exercise to be done and a text to be studied.

When teaching a rule in grammar, one of the two following means might be employed according to the age of the pupils.

First means: to go from the rule to examples. This means is successful only with pupils of the higher grammar grades. The teacher formulates the rule or has it read from the manual; he explains it and then shows its application in examples written on the board; he after-

ward asks the children to find examples in which the rule is applied.

Second means : to go from examples to the rule. In elementary instruction in grammar, it is preferable to go from the particular to the general, from examples to the rule. Thus, in teaching the noun, the teacher might ask some of the pupils' names, or better still write them on the black-board; then he might remark that every person has a name. Afterward, pointing out some of the objects in the class-room, he asks for their names and writes them on the black-board. He then states that everything has a name; and concludes by saying that the names written on the black-board are nouns, because some of them serve to name and distinguish persons, others to name and distinguish things and places. Thence the definition is easily deduced, and the teacher has only to state precisely its terms.

In the same way the name of some object might be written on the black-board, and the pupils questioned as to what qualities belong to it; the names of these qualities are then written with the name of the object; after some explanation on the words, *quality*, to *qualify* and *qualifying*, the definition of a qualifying adjective is easily formulated.

This means does not exclude the study of the book, without which the pupils would quickly forget both rules and definitions. By the oral lesson the grammar is explained; but it is by the application of the rules either orally or in writing, and by memory work, that the principles are fixed in the minds of the children.

General observations. The teacher of grammar should attend to the following remarks:

1. The important thing is to make the children *understand, learn*, and afterward *apply* few rules at a time.

2. To teach a definition or rule the experimental and inductive method, which goes from examples to the definition or rule, seems preferable to the deductive method

which descends from a stated principle to an example illustrating it.

3. The grammar of ideas ought to be substituted for the grammar of words and formulas; the latter is more rapid and convenient, but too often limits itself to putting into the minds of children vague notions. The teacher should show by examples that in its essential points grammar is only the logic of language. When treating of the parts of speech he should say that *nouns* are required to designate beings, and *adjectives* to show their qualities; *articles* and *demonstrative adjectives* to distinguish these nouns from one another; *pronouns* to avoid the frequent repetition of nouns, *verbs* to make actions known, and *adverbs* to render precise the diverse modes of actions and states; *prepositions* and *conjunctions* to show the relations of ideas and sentences. Thus the pupil will learn practically a little logic.

4. The parts of speech, the reciprocal relations of the elements of a proposition, and the rules of syntax which show the way the words of a sentence and the sentences among themselves are joined, should be simultaneous studies.

5. Grammar contains two kinds of rules: some are continually used, and a person cannot be ignorant of them without exposing himself to glaring mistakes; there are others more subtle but less necessary in practice. The study of these latter rules should be reserved for the senior classes.

6. The general rule should first be explained; in studying and applying it the important exceptions may be deduced. When possible the pupils should be allowed to find the rule.

7. The teacher should consider frequent and varied exercises in conjugation as being of capital importance. This holds good in the study of every language.

8. In grammatical instruction the book is only secondary, but it is necessary; the pupils require it after the lesson, to study the exact formula of definitions and rules, and to make recapitulations and reviews, with-

out which they would soon forget the explanations, even those they had thoroughly learned.

Analysis. Analysis is an important exercise in the teaching of grammar, composition, reading, and modern languages. The weakness of children in these different subjects comes in part from the fact that the decomposition and analytical study of sentences is not made practical for them. Sufficient exercises in analysis are gone through, but in a mechanical way, instead of exercising the reflection and judgment of the pupils, and accustoming them to give an account of what they read or write.

Analysis is general or particular according as sentences are divided into their logical elements, which are propositions, or into their grammatical elements, which are words. Analysis follows instruction in grammar, of which it is the application; but its chief object is to make the children reflect, to give them greater facility in understanding what they read, in composing correctly and punctuating properly what they write.

General directions. 1. Analysis, whether particular or general, is a test of the grammatical knowledge of the pupils; hence they should be asked to analyze only such matter as they have already studied.

2. As far as possible, analysis, both general and particular should be carried on together, for both study the organism of the sentence: the first the ideas, the second the nature and function of the words.

3. Analysis explains ideas first, then words; hence general analysis should precede particular analysis.

4. Exercises in analysis should generally be done orally.

5. The aim of grammatical analysis is to show the reciprocal relation of the parts of a sentence, and of the sentences among themselves; in attaining this result all subtlety of nomenclature should be avoided.

Primary grades. The chief object of grammatical analysis (parsing) in the primary grades is to make the

pupils find out the parts of speech already studied, as far as the knowledge of grammar already acquired permits. The text of the reading lesson, or anything else previously written in their copybooks or on the black-board, serves for this exercise: the teacher will take special notice sometimes of one kind of word, and sometimes of another. As the grammatical instruction advances, certain complementary attributes may be added, such as the gender, number, and person of nouns and pronouns, the tenses of verbs, and the moods in which they are used.

During this exercise, questions might sometimes be asked on the grammatical rules which are applied, thus teaching the child to reason, and to prove his analysis.

Lower grammar grades. When the pupils of the lower grammar grades are able to recognize the subject and the extensions of a verb, they may be initiated into general analysis, which thenceforth should precede and simplify particular analysis.

Instruction in this subject must be, perhaps more than in any other, methodical and progressive. The teacher should first get the pupils to analyze only simple sentences the essential terms of which are expressed by one word as *Tom ate a cake*. The subject might be at one time a proper noun, at another a common noun, for which a pronoun might be substituted later. The verb might be introduced in different tenses and different persons; then, after suitable explanations, completions and extensions are added.

Keeping within the limits of the children's knowledge of grammar, the teacher should proceed to particular analysis, which, however, he will generally restrict to the more important words of the sentence to be analyzed.

Higher grammar grades. In the higher grammar grades the pupils practise the dividing of a sentence into its parts. This work should not be difficult or complicated in the beginning. At first the teacher merely distinguishes between the sentences, speaking of them as

principal and subordinate, waiting till later, to remark that the latter are also called enlargements and extensions, and that there are as many different kinds as there are different complements. The relation of the sentences and their connection with one another are carefully noticed, and the attention of pupils is drawn to the connecting word. The idea expressed in the sentence is clearly brought out. The difficulties in connection with particular analysis, which were not explained to the lower grammar grades, are explained to this section.

Specimen Lessons : Number (of nouns).

Singular. Pencils, pens, books, slates, keys, etc., are placed on the table; the black-board is divided into two columns. The teacher holds up *one* pencil and asks: What is this object? (A pencil.) Spell the word. How many have I in my hand? (One.) The word is written on the board, in the left column. *One* pen, *one* book, etc., are shown and questions similar to those above are asked, and the words written under the word *pencil*.

Plural. The teacher holds up a pencil in each hand, and asks: What is this object? (A pencil.) And this? (A pencil.) He holds two pencils in one hand and asks: What have I in my hand? (Two pencils.) The word pencils is written in the right-hand column opposite the word pencil. Similarly for three pencils, four pencils, etc., two, three, four pens, etc., and the words: *pens*, *books*, etc., are written under pencils. The teacher elicits from the pupils that the words in the left column stand for *one* thing, and those in the right for *several* things. He states that when nouns are examined in this way they are spoken of in reference to *number*: when a single object is meant, the noun is said to be in the *singular* number; when several objects are referred to, the noun is said to be in the *plural* number. The black-board illustration may take the following form:

SINGULAR NUMBER.	PLURAL NUMBER.
Words standing for <i>one</i> thing.	Words standing for <i>more than one</i> thing.
Pencil Pen Book	Pencils. Pens. Books.

Formation of plural. The pupils are made to observe how the words in the right-hand column differ from those in the left: *an s is added to each.* They are told that this is the general way to form the plural in nouns. At the next lesson irregular plurals are explained; and at later lessons, number in *verbs* and their agreement with their subjects are taught.

Tenses.

The teacher may question the pupils as follows: Did you take breakfast to-day? Had you breakfast yesterday? Will you take breakfast to-morrow? The three great divisions of time are deduced.

Present tense. A pupil is told to walk across the room, and to tell what he is doing. He answers: *I walk now.* Another says: *I talk now.* Another, *I learn grammar at present,* etc.

Past tense. The teacher asks a pupil: Were you at school yesterday? Did you walk or ride to school? *I walked to school yesterday.* By questioning, other pupils are made to say: *He talked last week; John listened yesterday.*

Future tense. A pupil is asked: Will you come to school to-morrow? *I will come to school to-morrow. He will come like a thief,* etc.

The teacher elicits from the pupils that the first-column sentences indicate actions done at the present time

(now); the middle-column indicate actions done in the past, and the right-column, actions to be done in the future. He tells the class that the term used in grammar for present time, is *present* tense, etc.

Black-board Sketch.

PRESENT TENSE.	PAST TENSE.	FUTURE TENSE.
Actions done at present time.	Actions done in past time.	Actions to be done in the future.
I walk now. I talk at present. We learn grammar.	I walked to school yesterday. He talked last week. John learned grammar.	I shall walk to school to-morrow. He will come like a thief. They will learn history.

Formation of tenses. The pupils are made to notice how the past tense is formed from the present; also how the future is formed. They are told that *shall* and *will* are employed to form the future tense.

Review. When is a verb in the present tense? In the past tense? What is the sign of the future tense? etc.

Sentence.

Sentence. The teacher writes on the black-board such names as *man, boy, bird, horse*, etc., and asks the pupils to make a statement or say something about each: the man walks; the boy prays; the bird flies. He may address the class thus: If I walked into a room and said to you, while pointing to a man outside the window, *the man walks*, would you understand what I meant? (Yes.) The other sentences should be similarly questioned on. The teacher tells the class that a *group of words conveying some complete sense* is called a *sentence*.

Parts of a sentence. The questions may follow one another, thus: Read the first sentence. What am I speaking about? (A man.) What am I speaking about in the second sentence? (A boy.) And in the third sentence? (A bird.)

In each sentence I am speaking about something. Read the first sentence again. What do I say about the man? (That he walks.) *In each sentence I make a statement about something.* The word or words that denote what I speak about is called the *subject*; what I say about that of which I speak is called the *predicate*. Questions are put to impress the terms subject and predicate. What part of the sentence is man? (The subject.) Why? Read the word which is the predicate,—walks. Why is walks the predicate? etc.

The teacher may put the following form on the black-board:

SUBJECT.	PREDICATE.
What I speak about.	What I say.
The man The boy The bird	walks. prays. flies.

Enlargements of the Subject.

The black-board being divided into two columns, the following sentences are written on the left side: The boy sings; my brother came with me; the book is soiled; walking is agreeable; the boy showed his slate. The subject in each sentence is underlined. The pupils are questioned thus: Do you know the kind of boy that sings? Is he tall or small; fat or thin, etc.? The teacher selects the most suitable of the adjectives supplied by the pupils, *e.g.*, the *tall* boy sings.

Questioning on the second sentence, the teacher may

say to the pupil: What are your brothers' names? (John, Patrick, James.) Which of them came with you? (Patrick.) Repeat the statement fully: My brother *Patrick* came with me. The other sentences are questioned on similarly, and the right and left columns appear on the black-board as shown below:

The boy sings.
My brother came with me.
The book is soiled.
Walking is agreeable.
The boy showed his slate.

The *tall* boy sings.
My brother, *Patrick*, came with me.
The *girl's* book is soiled.
Walking *in the park* is agreeable.
The boy, *having finished his work*,
showed his slate.

The teacher elicits from the pupils that the underlined words in the right-hand column tell something about the subject, modify our knowledge of it, and are called its modifiers. By examining the sentences, the pupils should be made to observe that the subject may be modified by: adjectives, nouns in apposition, possessive cases, prepositional and participial phrases, etc.

Lessons on the modifiers of the *object* and on the extensions of the *predicate* may be given in a similar manner.

Complex Sentence.

Before getting the pupils to analyze complex sentences, it would be advisable to have a few such sentences constructed. The teacher writes on the black-board the sentence: *The boy got the position*; he gets the pupils to distinguish the subject, predicate, and object, and asks: What boy got the position? and arrives at the statement: The boy *who was diligent at school* got the position. Is the position a good one? What salary is attached to it? The following sentence is added: The boy *who was diligent at school* got the position which is worth \$300 a year. When did the boy get the position? When this question has been answered the complete statement will stand thus: *When he grew up*, the

boy *who was diligent at school* got the position *which is worth \$300 a year*.

The pupils will easily see that the expression "who was diligent at school" enlarges the subject, and is an adjective clause; similarly for the enlargement of the object, and the extension of the predicate.

Exercises on conjugations. Exercises on conjugation of verbs are of the utmost importance. By a kind of intuitive process, they are begun with very young children in the first grammar lessons. They should be increased in the primary and lower grammar grades, and still more in the higher grammar division, particularly at the beginning of the scholastic year. These exercises are frequently done orally, but they should also be written.

To prevent the lesson from becoming too mechanical the teacher may generally have the verbs conjugated in certain tenses or in certain persons, preferably in the tenses most used.

It is also advantageous to conjugate orally by propositions, that is to give to the verb an extension or completion which can be changed for each of the three persons. The teacher should make sure that the pupils know well the terminations of the verb for the different persons and numbers. Exercises like the following are suitable for these ends: conjugate through the three persons singular and plural, the sentence—*I learn my lesson, thou learnest thy lesson, he learns his lesson*, etc.

IV.—Orthography.

Orthography is the way of spelling correctly the words of a language, according to established usage. For the past few years dictation has been violently attacked in pedagogical works, but this was owing to the abuse of the exercise. Sometimes dictation was looked on only as a means of keeping the children occupied; and neither measure nor intelligence was used in the choice of matter for dictation; it was rarely prepared, so that, however

useful and interesting it might be, it became a dry and tedious task. Some reformers have even advocated its radical suppression: this is going from one error to another. Dictation is the complement of the oral lessons in spelling, as well as a test of the knowledge the pupils have in this subject.

Orthography is chiefly a matter of memory; the more, then, the different recollections connected with words are increased, the greater chance there is of fixing the correct spelling of the word in the child's memory. The rational methods of teaching spelling are to have the word *seen* either by reading it from the book or from the black-board; to have it *heard*, by pronunciation; to have it *written* either by transcription or dictation.

Preparatory classes. The pupils of the preparatory classes are initiated into orthography: (1) By spelling first from the open book, then with the book closed, certain words which they have just read in the lesson; (2) by copying the words in transcription.

They might be made to transcribe the text of the reading book according as they learn to read it. When they know how to read fluently, they should attempt transcription properly so called. For this exercise, the teacher selects a short paragraph from a chapter which has just been read; he writes on the black-board any words which might present a difficulty either in meaning or orthography; he explains them and has them spelled. The pupils then apply themselves to transcribe the paragraph indicated.

From time to time a dictation of two or three lines containing some of the words which have been transcribed, or even a short phrase previously written, might serve as an examination test, and stimulate primary pupils.

The teacher might also have written on the black-board, after having explained them, a series of words having some connection with each other; for instance, the names of the days of the week, of the months, and of

the seasons of the year; the first ten or twenty numerals; the names of ecclesiastical, civil, or military grades; or again the names of objects in the class-room, at home, in the church, in the country, in the farm-yard, etc.

The primary grades. The pupils of this division learn orthography by means of the following exercises: (1) The spelling of some words during the reading lesson; (2) transcription; (3) dictation.

Works on the study of language contain exercises which should be explained by the teacher and written carefully by the pupils. The children transcribe selected words of different kinds, thus learning their correct spelling. Dictation lessons might intervene as a means of testing. They bear the same relation to spelling that recitations do to the study of memory lessons.

Lower and higher grammar grades. In the lower and higher grammar grades the following processes might be employed with advantage in the study of spelling:

1. In reading lessons the attention of the pupils is drawn to the orthography of certain words.

2. The teacher makes a list of common words in which the pupils are liable to make mistakes, and gives some of them after each dictation.

3. The pupils write once or several times, either in the margin or at the end of the dictation, the words which they have spelled wrong.

4. The pupils learn a list of roots, chosen from those which are used in the formation of words frequently met with.

5. Some teachers employ another process with success. At a suitable time they indicate to the pupils some pages of a reading book from which the dictation will be chosen. Sometimes they divide the class into rival sections; at the head of each is a monitor, who prepares his side for the examination in orthography, by exercises in spelling on the selected text. The reading books might be replaced by collections of dictations or literary extracts, which are distributed at an opportune time. If

the teacher has authority and knows how to stir up emulation, he may obtain rapid progress by this means.

Choice of the dictation. 1. As dictation is an exercise in orthography, it should be chosen with the object of applying the rules studied in the grammar lessons previously given.

2. Generally the dictation should be a continuous text, chosen for its simplicity, interest, and beautiful ideas.

3. If the text dictated does not give sufficient application of certain important words, it might be followed by detached sentences containing the words. These sentences should be natural, and not taken at will to multiply difficulties.

4. Dictations should be short. It is best always to spare time for correction and for the oral or written exercises to which the dictation may give occasion. Besides, experience proves that the progress of the pupils depends less on the number and length of the dictations than on the skill of the teacher in deriving the best possible advantage from these exercises.

5. It would be well if the dictation given in the monthly tests were recapitulatory, that is, containing a certain number of sentences borrowed from previous dictations. It would be even advantageous to give as a test a dictation which has been already written and corrected.

How to give dictation. Before having the test written, the teacher should read it aloud slowly. If there be any words in it which he thinks the greater number of the pupils would be likely to spell incorrectly, he should have them spelled aloud and even written on the black-board. This is necessary in order to prevent the children from getting a wrong impression fixed on their minds, which would make them reproduce the same mistakes frequently.

The dictation proper might follow these lines. The teacher, being very careful to articulate clearly, dictates part of a sentence slowly; the pupil farthest away says it again, and all write it in silence; then one of the slowest

writers repeats it aloud. Sometimes, particularly when the room is not very large, the repetition by the pupils may be omitted, and the dictation read only once; the pupils become quickly accustomed to this, and their attention is better sustained.

In classes comprising several divisions, part of the time might be given to each. While dictation is being given to one division, the others may be engaged at some exercise in orthography which has been explained to them. The punctuation should be made evident by pauses. The different punctuations should be called out completely in the primary grades; the periods and semicolons in the middle division; the periods only in the senior division.

Correction of the dictation. There are several methods of correcting dictation:

1. Correction after each sentence or group of sentences. The teacher makes a sign to one pupil to begin the spelling; then he tells another to continue, and so on till the end of the sentence or group of sentences. If he notices some important words or any other difficulty, he stops the exercise to give an explanation of the orthography of these words, or to question the pupils on the difficulty.

2. When the dictation is completely finished, the teacher has spelled aloud the words which he thinks the pupils may have misspelled, and makes each pupil correct his own work. More than any other, this method of correction needs constant supervision.

3. The pupils change exercise books for the spelling. Each pupil underlines his companion's mistakes, and marks the number in the margin; then he takes his own book and corrects the misspelled words which he finds marked. If the pupils were backward, a second spelling of the more important words might be necessary.

4. Correction without spelling. The dictation is written on a black-board by one pupil, while his companions do it in their copybooks; the black-board work is then

corrected, and each pupil corrects his own or that which has been given to him.

The teacher himself should correct the dictation which has been done as a test, merely underlining the mistakes. It is only by correcting them personally in this way, that he will be able to note the progress of the pupils; moreover the nature of the errors will guide him in selecting the best means of preventing them.

Verification of corrections. To make sure that the corrections of the dictation have been well made, one of the following means may be adopted: 1. The teacher takes up the copybooks, sometimes of one desk, sometimes of another, so as to see them all once or twice a week in the lower classes, more rarely in the higher; or he takes the books of the three or four pupils whom he has remarked most attentive or most distracted. He then looks over the books, and rewards or punishes according to the number of errors which have been left uncorrected.

2. The teacher takes up the books as described above, and has them examined by some of the advanced pupils.

3. In some classes the pupils form rival camps; then each one corrects the copybook of his rival, and whichever of the two pupils has corrected best, receives a reward.

The teacher should do his utmost to make the pupils attend to spelling, not only in the dictation and the exercises which accompany it, but also in everything else they may have to write: letters, compositions, problems, and transcriptions.

The title of the dictation should be written on the first line of the copy. The dictation might be followed by exercises, grammatical and etymological, varying in difficulty according to the division. The explanations should bear on few words, and be written immediately after the dictation exercise. These explanations must first be done orally. For the primary grades they might

be afterward written on the black-board, and copied by the pupils. The corrected work should then be revised by the teacher.

Primary Grades.

Christmas.

"Christmas! the very word is an epic. It rings in the brain like some haunting chord of music. The mere thought of it fills the mind with a whole gallery of enchanting pictures. The least reference to it is like a snatch of joyous song."—*The Golden Stair*.

(1) **Words to write on black-board and explain.** Christmas, epic, haunting chord, mere, gallery, enchanting, reference, snatch.

(2) **Verbs.** Is, rings, fills. **Adjectives.** Very, mere, haunting, whole, enchanting.

(3) **Composition.** When is Christmas? Kind of weather? Do you like it? Why?

Lower Grammar Grades.

The Evening Milking.

"The sun has already set, and the night breeze is chilly. Within the dairy yonder there will soon be Correggio-like effects—deep shade only partially removed by lighted lanterns. One hears the clink of heavy shoon on the bowlders, and the clatter of pails between dairy and byre. The splish-splash of the evening milking has begun."—*Ibid*.

(1) **Words to write and explain.** Correggio-like, partially, lanterns, clink, shoon, bowlders, byre, splish-splash.

(2) **Words to compare.** Dairy, byre, clink, clatter.

(3) **Composition exercise.** "Describe the Evening Milking you have seen."

Higher Grammar Grades.

Paper.

The ancients used paper made from the leaves of the papyrus. At an ulterior but indeterminate epoch the textile filaments which envelop cotton grains were used. China glories in this invention; but the Arabs appropriated it in the eighth century, and introduced it into the countries which they subjected to the Crescent. . . .

Words to explain. Papyrus, textile, filament, Crescent.

(1) **Summary.** For writing—the bark of trees, the leaves of the papyrus, wood, and paper manufactured from cotton or rags, were used.

(2) **Paper.** Word formed from papyrus, the name of a reed which grows abundantly on the banks of the Nile.

(3) **Ulterior.** Placed after. It has for synonym posterior, and for contrary, anterior.

(4) **Indeterminate.** Formed from *term* (bourne or limit) and the two prefixes *de* and *in*. Words of the same family: termination and determine.

(5) **Textile.** Which may be woven. Principal textile plants: flax, hemp, cotton.

(6) **Crescent.** This word designates here the Turkish power, the standard of which is a crescent.

V.—Composition.

No exercise gives children more trouble than composition, because no other requires so much reflection and unaided work; but the great difficulty which pupils in the higher grammar grades find in narrative or description, and more especially in composition on abstract subjects, often arises from the fact of their not having been sufficiently prepared in the lower grades. Not to accus-

tom a pupil to composition till he is in the lower or perhaps in the higher grammar grades, and then to expect him to treat a subject which requires a *knowledge of style*, is like trying to build without foundations. It is not to be wondered at if the results of such a practice are very mediocre. The young pupil knows few things, and consequently has few ideas; his vocabulary is very limited, and he does not always understand the meaning of the simple words which he uses. The teacher must then begin by giving him *ideas* and *words*; and by a logical series of exercises, teach him to connect those ideas and to express them correctly.

Primary grades. In these grades less time should be given to the work of composition proper, than to exercises conducive to the development of the faculty of observation, to the increasing of ideas and words, and to the making of short statements about things.

To develop the faculty of observation in a child, and at the same time to enlarge his vocabulary, so that he may be able to write without too much sameness and monotony, several different methods are adopted. The most practical is this: A familiar object is shown to the pupils, and by a series of suitable questions, they are led to reflect, and to find the ideas and words which the object may suggest—nature, form, color, dimensions, constituent parts, uses, etc. Thus the children are accustomed to speak and form complete sentences, instead of replying, as they are inclined to do, by a single word. In answer to the question *What is the color of your rule?* the child ought not to be allowed to answer by the single word, black; he should be made to say or to write on the black-board: *My rule is black* or *My rule is black and shiny*. Some short sentences written on the black-board would summarize the oral exercise, and the pupils should copy them into their exercise books.

To facilitate the acquisition of ideas and words by the young pupils, the different exercises which have been specified in connection with language training, might

also be made use of. Before writing letters and descriptions, the pupils must be able to compose detached sentences with correctness and variety.

For composition proper, answers should be given orally to three or four questions relating to the same subject. The questions may be written on the black-board and numbered, and also their corresponding answers. These answers are then copied by the children: this constitutes their composition.¹

The subject might be a very short letter; a story told by the teacher, and repeated several times by the pupils; the description of a very familiar object, or an event in their school life, etc. The following exercise may be taken as a sample of work suitable for this division.

Questions.

1. Did you ever see a poor blind man? Where?
2. What was his appearance? Was he alone? What did he say?
3. Were you kind to him? What did you give him?

These questions may be written on the left side of the black-board, and answered as indicated above.²

Lower grammar. All the resources above mentioned for the acquisition of ideas and words, and for the development of the faculty of observation, should still be utilized: reading lessons, exercises in language study, and object lessons. In addition, it will be well to give frequent practice in very short compositions of a simple kind, such as stories, letters, and interesting subjects in science or history.

Narratives. The teacher selects some event familiar to the pupils. He relates it, and asks questions to make sure that it has been understood. Then he writes a

¹ If the composition is to be copied from the black-board, it would be advisable to erase some of the words, or to leave only their initial letters, so as to exercise the intelligence of the pupils.

² The answers to the groups of questions in each number might be put in separate paragraphs.

summary of the principal ideas on the black-board. This summary should be developed orally by the class, before the written work is attempted. For this purpose, the teacher asks a few of the most intelligent pupils to develop the first of the ideas contained in the plan. He then selects the best answer, completes and corrects it, supplying if necessary the proper word or the correct expression, and gets some one to repeat it. The second and the third ideas are similarly developed; then the pupils write their composition, devoting a separate paragraph to the development of each of the points in the outline. By thus simplifying the work, the children acquire a taste for this kind of exercise, and the correction of it becomes less laborious.

Letters. The pupils of the lower grammar should get frequent practice in the composition of short letters: family correspondence for Christmas, birthdays, letters of sympathy and condolence; an account of a short journey, letters to friends, descriptions of local events or incidents in school life. These might be prepared orally, and the outlines written on the black-board. The teacher should instruct the pupils in the different forms of address at the beginning and end of letters. From time to time the exercises ought to be done as if for the mail, written on note-paper, and enclosed in sealed and addressed envelopes.

Subjects of scientific or historic interest. These compositions demand greater intellectual effort from the pupils than simple narratives. They require to be more thoroughly prepared than others, or they will be very badly explained. For example, if a teacher choose as the subject of composition the *Mariner's Compass*, and merely give the two chief headings: *description* and *use*, it is quite certain that these indications will be insufficient for the pupils. The work would be much more agreeable and more advantageous if it were prepared by showing a compass to the children and enumerating its different parts. Two or three pupils in succession then

give the oral description required, and one is sent to the black-board to write it in a few lines. The teacher then invites the criticism of the other pupils. One may say, perhaps, that the same words have been repeated too frequently; another, that conjunctions are employed too often; a third, that the punctuation is incorrect, and either destroys the sense or makes it equivocal. The teacher should direct this criticism himself, and make it bear, in the first place, on the correctness of the thoughts expressed, then on the construction of the sentences, and lastly on the propriety of terms and equivalent expressions. He will select the best sentences given by the pupils to express the same idea, and will state the reason for his selection. He must frequently question in order to promote reflection. He ought to praise pupils who have been particularly successful in answering, and to explain the difficulties experienced by the others. The original production on the black-board should not be effaced; the defective parts are condemned, and the corrections written above them. When the work is sufficiently correct, it is read aloud, and then erased. Afterward the pupils reproduce from memory, in their copybooks, the developments of this first part.

This collective work has the greatest advantages, and insures rapid progress. It extends over only a few sentences and lasts about half an hour; but it is far more profitable to the pupils than a much longer exercise in which they would be left to their own devices.

The second part of the subject: *the use of the compass*, should be prepared in the same way at another lesson, after which the children should write the whole subject. The correction will be neither long nor complicated, and this is one of the great advantages of the process.

The subject for composition may be sometimes proposed to this division in the following way: by questions the teacher gets the pupils to express their ideas on a subject; the plan is established during the questioning; it is written on the board, and copied by the pupils at the head of their exercise; the questions are answered orally,

but the answers are not written on the board. The subject—*hay-making*—may be developed in this way.

Questions (for rural schools).

1. What is hay? How is it produced? Do you like hay-making? Why?
2. At what time of the year is hay made? Was this year favorable for hay-making?
3. Was the produce abundant? Why does the farmer like an abundant crop of hay?

Higher grammar grades. As in the other divisions, instruction in composition includes preparatory exercises as well as composition proper.

Preparatory exercises. 1. Varied exercises in lexicology and phraseology, such as making suitable statements about subjects, the invention and transposition of propositions or sentences, paraphrasing verse into prose, summaries of reading lessons, etc.

2. The explanation, study, and application of the general rules relating to composition and style.

3. The reading, accompanied by explanations, of extracts from the best authors; Socratic questions being employed to lead the pupils to observe the ideas or *invention*, the order followed by the writer, or *arrangement*, the expressions made use of, or *diction*.

4. Readings in class by the teacher. In the higher classes it would be useful for the teacher once or twice each week, for a half-hour, to give a reading followed by a brief commentary. This exercise develops in pupils a taste for useful reading, increases the number of their ideas, and enriches their vocabulary. It would suggest moral ideas, and introduce variety into the lessons. These readings should be instructive and interesting, unquestionable in style, and expressive in sentiment. They might be reproduced orally by a few pupils, and sometimes followed by a written summary.

Subjects for compositions. The principal subjects for

this division are historical narratives, familiar stories, descriptions, letters, and the development of ideas relating to morals. These different kinds of compositions should form part of the monthly division of the programme, and the principles relating to each kind should be explained. It is particularly recommended to include letters, descriptions, and subjects connected with school life, the customs and industries of the country, the events of the time, the scenery of the neighborhood, the celebrities of the state, etc. This is an excellent means for leading the pupils to express their ideas with ease and simplicity.

From time to time, the subject might be prepared by the oral development of the ideas contained in the outline of a composition. At least the plan suggested by the teacher should be always worked out with the aid of the children, by an oral and collective preparation. Sometimes it is advisable to make known, a day or two beforehand, the subject of composition: the pupils will have time to think about it and to elaborate their plan of treatment. The comparison between this plan and that which is afterward worked out in class will excite curiosity, exercise judgment, and give a personal characteristic to the compositions.

In this division the plan may also be established by each pupil in particular during the oral preparation. The teacher proposes a series of questions, to each of which an oral answer is given; some answers are admitted as being correct, others rejected as defective. The pupils build up their plans by choosing for each idea one of the correct answers. This procedure gives more room to the initiative of the pupil than that which consists in developing a plan imposed on the whole class. However, even with a common plan, it is possible to introduce great variety into the development.

Specimen Plan.

Letter to a friend describing an excursion to an old fort.

Introduction. Why I send this description.

Narrative. 1. Appearance of the ruin: where situated, state of preservation, appearance in times past.

2. Historical associations: battles fought; traditions of the place, etc.

Conclusion. Request to friend to describe his visit to.....

Correction of compositions. The correction of compositions includes: individual correction, class criticism, and collective correction. The individual correction requires much time; additions, suppressions, and corrections have to be made, without counting the more or less numerous marginal annotations necessary. This work can be simplified: (1) By making good collective preparation of the subject, and thus diminishing the number of mistakes liable to be made; (2) by correcting methodically, that is, making the corrections bear principally on two or three defects, which should be followed up in all the copies for some weeks; (3) by devoting sufficient time to the general or collective correction.

The class criticism on the exercises in composition is indispensable. It consists in reading some special passages marked beforehand, either because the reading of them will be a matter of general interest, or because they may serve as models, or afford an opportunity of making remarks on style, useful to the whole class. From time to time, an entire composition, chosen from among the best, might be read through and criticised.

The general correction is an exercise most conducive to rapid progress in composition, and it possesses the great advantage of rousing the intellectual activity of the whole class. When correcting the exercises, the teacher marks some defective sentences; after the class criticism, he sends a pupil to the black-board, dictates one of these sentences to him, and then asks the class to point out the mistakes. These being pointed out, all the pupils try to write the sentence correctly in their own books. The

teacher asks some of them to read aloud the result of their work; he adopts the best, modifies it a little, if necessary, and dictates it to the whole class. In this way he corrects the three or four sentences which are the object of the exercise.

Simultaneous composition and correction. In the lower and the higher grammar grades, the following process may sometimes be employed:

1. The work of invention. The teacher proposes the subject of composition, and with the aid of the whole class, thinks out the principal ideas connected with it. All the ideas given by the pupils and accepted by the teacher are summarized on the black-board, each by one word.

2. Work of arrangement. The figures 1, 2, 3 are marked under the words expressing the ideas to be developed in the first, second, and third sentences, respectively, and any ideas expressed twice are suppressed. The teacher then coördinates the ideas in a very short plan, and dictates it to the pupils.

3. Style, or expression. The black-board and the exercise books are divided into two columns by a vertical line. The teacher may suggest the development of the first idea; then each pupil writes his own development, first roughly on a fly-leaf, and then carefully in the left column of the exercise book. The teacher gets some of the pupils to read aloud what they have composed; he writes one of the best productions on the board, and with the aid of the class criticises and corrects it. The sentence thus modified is rewritten by the teacher and pupils, in the right-hand columns of the board and exercise books. The other ideas of the plan are worked out in the same way.

VI.—Study of Selected Extracts.

The study of simple and carefully selected poems is very useful for children. It elevates their minds, helps

to form their taste, gives them delicate and ennobling ideas, and thus becomes a species of moral education.

Choice of extracts. The pieces for recitation should conform to the following conditions:

1. That they be irrefragable in ideas and form of expression.
2. That the ideas be conducive to the general education of the children.
3. That they be not above the mental capacity of those who learn them.

It is easier to make children learn poetry than prose: they learn it more quickly, and the language is generally easier and more varied. The study of selected extracts should include preparatory explanations, exercises on the words, and recitation.

Preparatory classes. With very young children the preparatory explanation is a talk on the subject. The lesson is studied by the auditory process, and verse by verse, if the sense permits. The teacher says the first part of a poem—one or two verses, with suitable inflections; it is then repeated by all simultaneously, then by two or three singly, and lastly by selected groups. It is thus continued till the poem is known.

Primary grades. In this division the study is done both by hearing and reading. The poem is divided into several parts, one of which is sufficient for each lesson; but before studying any of these portions, a general idea of the whole poem should be given. Each part might include one or two stanzas, which are first explained, and then repeated with inflections and pauses by the teacher. The repetition, line by line, is first collective, then individual. The utterance should be slow, the pauses sufficient, the inflections natural, and the same passage must be repeated till a satisfactory result is obtained.

Lower and higher grammar grades. In these grades the teacher might proceed on the following lines:

1. Reading of the piece to give a general notion of the ideas and sentiments contained in it.

2. Explanation of the text, as in an ordinary reading lesson.

3. Pattern reading in which the teacher, by inflections and pauses, makes the important words stand out, and the meaning clear. He should, briefly and simply, give reasons for the different intonations, pauses, and inflections; and tell why certain words should be detached and emphasized.

4. Repetition of the poem or selection by several pupils, until the delivery is correct, natural, and expressive.

5. Simple and graceful gestures might be taught, after the literal study and the recitation of the poem.

Explanation of extracts. Extracts for recitation should be explained to the pupils. In the primary grades the explanation bears on words chiefly. In the lower and the higher grammar grades, the ideas, their connection, and the way in which they are expressed should be attended to.

Primary grades. The ideas, the words, and the mode of expression in the poems to be committed to memory by primary grade pupils, should be explained beforehand. This may be done in the following way:

1. Reading by the teacher. He employs the proper intonation, in order to make the pupils understand what the bare mechanical reading would not sufficiently bring out.

2. A talk with the pupils in order to elicit the principal and the secondary ideas.

3. Reading by the pupils.

4. Questions on the words and ideas.

SPECIMEN EXPLANATION OF THE POEM

LIFE THAT IS FELT.

A tender child of summers three,
Seeking her little bed at night,
Paused on the dark stair timidly.
"Oh, mother! Take my hand," said she,
"And then the dark will all be light."

We, older children, grope our way
From dark behind and dark before;
And only when our hands we lay,
Dear Lord, in Thine, the night is day
And there is darkness nevermore.

Reach downward to the sunless days
Wherein our guides are blind as we,
And faith is small and home delays,
Take Thou the hands of prayer we raise,
And let us feel the light of Thee!

—J. G. Whittier.

Leading idea. Who is spoken of in this poem, and in what connection?

Questions on the secondary ideas. Where was the little child going? When was the little child going to bed? Why did she stand on the stairs? Whom did she call, and in what words? etc.

Research of the moral lesson. Why should children love their parents? What should be thought of a child who would mock his parents? Whom does a child call when exposed to danger? Whom should all people, young and old, call on in danger? etc.

Explanation of words and phrases. Summers three, paused, timidly, dark stair, grope, sunless days, hands of prayer.

A few pupils are questioned on the subject-matter of the poem; then the teacher calls attention to the pauses, the emphatic words, the modulations required, and does this by reading the poem properly, and not by long explanations, which would be useless for young pupils.

Lower and higher grammar grades. With pupils of these divisions the explanation of a poem should begin by an analytical summary. For instance, if the teacher wishes to explain a fable, he might ask what personages appear on the scene, in what place, what are their actions, their words. These questions might be written on the black-board; or at least an order analogous to that indicated below should be followed in the explanation. The fable of *The Butterfly and the Snail* may be taken as an example.

- All upstarts, insolent in place,
Remind us of their vulgar race.
As in the sunshine of the morn
A Butterfly (but newly born),
5. Sat proudly perking on a rose,
With pert conceit his bosom glows;
-
11. His now-forgotten friend, a Snail,
Beneath his house, with slimy trail
Crawls o'er the grass, whom when he spies,
In wrath he to the gardener cries,
15. "What means yon peasant's daily toil,
From choking weeds to rid the soil?"
-
- Why grows the peach with crimson hue?
20. And why the plum's inviting blue?
Were they to feed his taste designed,
That vermin of voracious kind?
Crush then the slow, the pilfering race,
So purge thy garden from disgrace."
25. "What arrogance!" the Snail replied;
"How insolent is upstart pride!
Hadst thou not thus, with insult vain,
Provoked my patience to complain,
I had concealed thy meaner birth,
30. Nor traced thee to the scum of earth:
For scarce nine suns have waked the hours,
To swell the fruit and paint the flowers,
Since I thy humbler life surveyed,
In base, in sordid guise arrayed;
-
- I own my humble life, good friend;
40. Snail was I born, and Snail shall end.

And, what's a butterfly at best,
 He's but a caterpillar drest;
 And all thy race a numerous seed
 Shall prove of caterpillar breed." —*T. Gay.*

I.—Plan	Moral. Exposition, 3-13.	{ The first two lines. Personages { The butterfly (4-10). The snail (11-13). Circumstances of the narrative.			
			Intrigue (15-38).	1st episode (15-24).	The butterfly's address to the gardener (15-22).
					Destruction of the snail ad- vised (23-24).
	2d episode (25-38).	The snail's an- swer to but- terfly (25-30).			
		The snail's con- tempt for but- terfly (31-38).			
	Conclusion.	Repetition of the moral (39-44).			

- | | |
|----------------------------|--|
| II. Study of
characters | 1. The butterfly, <i>in this fable</i> : vain and envious. |
| | 2. The snail: humble and indignant. |
| III.—Study
of details | 1. Observations on the exactness of the ideas, which amounts to an appreciation of the conduct of the personages. |
| | 2. Characteristic expressions. |
| | 3. Explanation of words and phrases. |
| | 4. Remarks on some points of grammar. |
| | 5. Remarks on the style: the teacher should explain from this fable what is meant by style, direct narration, kinds of rhyme, etc. |

CHAPTER V.

OBJECT LESSONS AND ELEMENTARY SCIENCE.

Faculties and Principles.

Faculties to be developed. Natural science and object lesson are dependent on *observation*; hence they call into activity *sight, imagination, judgment, and reasoning*. Creation, being the work of God, is impressed with the stamp of His beauty, and speaks of Him to the *heart*, and especially to the *religious sentiment*. These lessons also train the *æsthetic* sense, and the power of correct expression.

Principle to be followed. Lessons should be taught intuitively.

II.—General Suggestions on Object Lessons.

Object lessons are familiar conversations on natural objects, or objects represented by pictures; they form the earliest introduction to the study of the experimental sciences.

Two steps in this teaching. Object lessons may be considered from two points of view, according to the subjects and to the method of treating them. If the teacher confine himself to simple conversations about familiar objects, and avoid all scientific expressions, he gives an *object lesson*. If, while still employing the conversational method, he gives in an experimental form a certain amount of scientific information, he gives a lesson on *elementary science*.

For instance, if the teacher, showing a piece of bread to the children, asks them what bread is made of, shows them some flour, and grains of wheat; and by a series of questions, leads them to understand and tell how bread is made: or again, if he shows a piece of chocolate, a

lump of sugar, and a specimen of cocoa, and without going into many details of manufacture, which would be suitable only for more advanced children, gives them a general idea of what chocolate is: he teaches object lessons on bread and chocolate.

To give more advanced pupils a practical knowledge of the thermometer, for instance, some elementary experiments are performed; these are followed by a description of the instrument, of its working and use, and an explanation of the principle on which it is based.

Subjects. Processes. The subjects for object lessons and elementary science are taken from the three kingdoms of nature, and from objects in every-day use. The lessons can thus be very varied and always lively and interesting.

In these lessons the intuitive processes of instruction should be employed. They consist in showing the pupils the objects which form the matter of the lesson; and in the simple *experiments* which illustrate the properties of things. In most cases there is no difficulty in procuring the objects required: articles of food, different metals, specimens of wood, plants, grains, and industrial products. All the objects required might be kept in the school museum. There are many simple and ingenious means of giving intuitive and experimental instruction in elementary science, without being obliged to use very costly materials.

In order to impress the lesson well on the pupils' minds, they may be obliged to write a summary of it; this summary may serve as the subject of a composition. The pupils of the primary grades may copy from the board, words or short propositions summarizing the instructions that have been given. In the other divisions, a fuller summary may be dictated.

Preparation. Educational results. Object lessons require careful preparation on the part of the teacher. Not only should he know his subject well, but he must also determine the most suitable points to develop. The

best way to be clear and practical is to circumscribe the subject, by eliminating anything that appears unnecessary or well known to the pupils. He should limit his explanations, and not wander from the subject by giving useless details. Thus, a teacher giving a lesson on combustibles, has before him specimens of coal, coke, anthracite, peat, etc.; he tells the origin of each, its peculiar qualities, and advantages. But if, in speaking of coal, he tries to tell something about gas, or tar and its different products, he will only confuse the minds of the children.

The results to be aimed at in object lessons and science teaching are, the education of the senses, the development of the faculty of observation, and the power to ascertain facts and discover their causes. These lessons are also a means of acquiring knowledge very useful in practical life. In giving the instruction the teacher might occasionally, by a few suitable reflections, raise the minds of the children to God, who created all things, and preserves them for the use of man.

III.—Method of Conducting an Object Lesson.

An object lesson may be given in the following manner:

1. Questions are asked on the previous lesson, particularly if it has any connection with the one about to be given.
2. The object and its parts are shown, and the pupils are asked to name them, to tell their nature and uses.
3. Having aroused interest, the teacher gives the lesson in the form of an explanation.
4. Questions are proposed on the matter gone over.
5. A recapitulation of the lesson is made, and if the pupils have not a text-book, a summary, to be learned by heart, is dictated to them.
6. A written exercise relating to the lesson is prescribed.

Lesson on a Potato (primary grades).

1. A potato is shown, and the pupils are asked to which kingdom of nature it belongs; whether they have ever seen potatoes dug up, and what they noticed in the stem, the tubers, etc. They are questioned briefly on the different uses of the potato.

2. The teacher gives the lesson according to his prepared plan:

- (a) Nature of the potato; by whom it was discovered.
- (b) Parts of the plant: stem, leaves, roots, and tubers.
- (c) Uses of the potato: food, alcohol, starch.
- (d) Questions and recapitulations.

Lesson on a Balance (lower grammar grades).

A balance being placed before the class, the teacher questions as follows:

I. The instrument examined. What is the name of this instrument?

Where have you seen instruments like it?

Of what substance were they made?

Press on end of beam: What is the oscillating part called? (Beam, arm, lever.)

On what does the beam rest? (On the beam-stand.)

What do you observe attached to each arm of the balance?

What happens when some weight is placed in one of the pans? (Place a penny in pan.)

And what occurs to the other pan?

What do you call that property of the pans by which they rise and fall in this way? (Mobility.)

Is the beam-stand of the balance movable?

Look: What do you notice attached to the centre of the beam? (A triangular prism, called a *knife-edge*.)

Summary. A balance is an instrument consisting of a fixed support called the *lever* which oscillates about the knife-edge, and bears a pan at each end.

II. Study of its parts. Look: I barely touched the beam; what did you remark?

Do you know the name given to a balance which moves by adding a little weight? (A *sensitive* balance.)

I take away both pans, in what position is the beam now? (Horizontal and at rest.)

What is its position now that both pans are again suspended? Give me another expression for *at rest* more suitable for the balance. (The balance is in equilibrium.)

I place a weight of a cent in each pan: how does the beam act?

What name is given to a balance which fulfils these conditions? (An *accurate* or *true* balance.)

Summary. The lever or beam rests on a triangular prism, called a knife-edge. It remains in equilibrium when the pans are empty, or when they carry equal weights. Then the balance is said to be *true* or *accurate*.

III. Experiments. 1. Here are weights and some sand: weigh an ounce of sand.

2. Weights, a glass, and a jug of water: weigh in the glass an ounce of water.

3. Weight of a book?

4. Equilibrate sand by two ounces; take away the two ounces and restore equilibrium.

Moral reflection: Are there false balances? false weights?

Lesson on Air (higher grammar grades).

1. Some questions, but not many, are asked on what the children may already know, concerning the existence and the functions of air.

2. The greater part of the time should be devoted to the lesson, which may be given in the following manner:

(a) **Existence of air.** Shown by a few experiments:

1. Resistance felt when a glass is immersed in water, mouth downward.

2. Escape of bubbles of air when the glass is slightly inclined in the water.

3. A little sugar is fixed with wax in the bottom of a glass. The glass is plunged vertically, mouth downward, in water. The compressed air in the glass prevents the water from rising to the sugar.

4. A strip of paper is gummed to the inside surface of a glass. The height to which the water will rise, when the glass is vertically immersed in it, can be seen from the part of the paper which gets wet.

(b) Composition of air. Shown by experiments:

1. The air is composed of two gases, one of which helps combustion. A cork bearing a lighted candle is placed on the water; an inverted glass kept at the level of the water, covers the candle: the candle burns, then goes out, and the water rises. Reason is given.

2. A graduated test-tube is substituted for the glass. Proportion of oxygen to nitrogen is found to be as one to four.

(c) Substances contained in the air. Carbonic-acid gas and watery vapor; their source should be indicated. Dust, living organisms, microbes.

(d) Uses of the air. It is indispensable to animals, to plants, and to combustion.

IV.—Adaptation of Object Lessons.

Adaptation of the same subject to the three divisions. Object lessons on the same subject may be given to the primary, lower, and higher grammar grades, the lessons being more or less complete according to the division. The teacher must always bear in mind, even when addressing the higher grades, that these lessons should be quite distinct from purely scientific theories. For instance, if a teacher wishes to speak of the phenomenon of

expansion, he must not give a dissertation on the coefficients of expansion. The phenomenon of expansion being established by experiments, the principal industrial applications of it ought to be described.

In the same way if a lesson is given on iron, care should be taken not to ask questions in chemistry bearing on the metallurgy of iron, and the manufacture of steel; but after a short explanation of the treatment of the ore, the properties and uses of iron should be elicited and stated. A lesson on iron might be adapted to the three divisions in the following way:

Primary grades. Pieces of iron, cast-iron, and iron ore are placed before the children. An engraving representing the interior of a mine would also be very useful. The teacher tells the children that iron is contained in the ore, and when this is subjected to the action of intense heat the metal melts and flows; this is the *casting*. He names, or has named, some objects made of cast-iron. He calls attention to the fact that this first product contains a little charcoal, which makes it brittle; that it is again melted, and that during the fusion the wind of large blowing machines burns away the charcoal, and thus transforms it into *true iron*, called wrought iron.

Lower grammar grades. Some details may be added concerning the smelting of the ore in great furnaces. An engraving representing a section of one of these furnaces is almost indispensable; it might, however, be replaced to a certain extent, by a sketch on the board. The distinctive characteristics and uses of gray and white cast-iron might be given in a few words. In connection with iron, the teacher might refer to sheet iron, tin, and galvanized iron. In speaking of steel, he should explain why it is harder and more brittle than iron; and the lesson concludes by showing some objects made of steel.

Higher grammar grades. If the same lesson be given to the senior division, it might be expanded somewhat as follows:

The teacher gives more detailed explanations on the metallurgy of iron, on the uses of cast-iron in industry, and on the conversion of the iron ore into iron. He might also give some information on the manufacture of steel, on tempering and its effects, and on the uses of different kinds of steel. He may mention the chemical compounds of iron, which are constantly required in medicine and industry.

This lesson on iron is an example of *concentric teaching*; the same lesson is given to the three divisions successively, with developments proportionate to the different ages of the pupils. But the lesson may also be given to the different divisions combined in one class; there would always be certain portions of the instruction within the mental reach of the very young pupils.

Adaptation of lessons to local requirements. The choice of subjects ought to be made with a view to local requirements. For instance, a lesson on cereals should not be given to city children in the same manner as to country children. It would be sufficient for the former to observe the stems and the grain of wheat, barley, and oats; to learn their different qualities and uses; the proper time for sowing, reaping, and threshing. With country children the lesson may be treated in this way: they are shown different varieties of wheat, barley, and oats; the advantages and disadvantages of each are pointed out; certain kinds are specified as suiting the district, and details useful to cultivators are mentioned.

The teacher should base his scheme of object lessons on the seasons, in order to be able to procure specimens of plants, fruits, and birds; and on the cultivation and industries of the district, to give the lessons a practical turn. Preserved specimens of many of the objects required for these lessons should be kept in the *school museum*. School *excursions* and *journeys* have the advantage of placing the children in presence of things about which they received lessons in school.

CHAPTER VI.

HISTORY.

I.—Faculties and Principles.

Faculties to be developed. The object of history is to instruct man in the proper regulation of his life, and to preserve national traditions. The study of history requires the exercise of *reason* to grasp the logical relations of events; of *memory* to retain facts; of *imagination* and *sentiment* to realize circumstances of time and place; of *conscience* to estimate men and events in accordance with the prescriptions of Christian morality; of *will* in order to regulate our conduct according to the practical teachings of history, and to develop a love of country.

Principles to be followed. The teaching should be:

1. Picturesque and animated, by making use of poetic descriptions, biographical sketches, and direct narration.
2. Rational, by showing causes and effects of events; the influence of character and human passions, etc.
3. Moral and religious, by discovering the action of Providence in human events.
4. Arranged so as to afford suitable exercises for the memory, aided by the imagination and the association of ideas.

II.—Programme.

A knowledge of history, sacred as well as profane, is required of all children in primary schools, in proportion to age and intellectual capacity. To make this study interesting and practical, too elaborate an account of ancient times should not be given, but more attention must be devoted to modern and contemporary history.

Preparatory classes. In this division the teaching should be restricted to narratives about great heroes and important historical events. Anecdotes related by the

teacher and repeated by the children are most suitable. Historical pictures are of great help in captivating and retaining attention. The engravings, which text-books for the young should always contain, are first explained; stories relative to the engravings will then interest the children and arouse their curiosity.

Primary grades. In this division history comprises a general knowledge of important events and historical celebrities. An important incident, or an interesting biography, will help to distinguish the different periods, and explain their leading characteristics. Class-books for young pupils ought to be compiled on this plan. The illustrations and engravings should be explained, in order to give the pupils an accurate knowledge of the customs, celebrities, and events about which they are reading.

Lower grammar grades. In the middle division the course of the previous year is treated in a fuller and more exact manner. The information need not be very detailed; but the teacher should give connecting links, so that the pupils may realize the relationship of each fact to the general subject. The historical facts are made definite by means of geography and chronology. The pupils should look carefully at the maps and pictures given in the class-book. Only the most important dates need be committed to memory.

Higher grammar grades. In the senior division the teacher gives a general view of the first part of the programme, and dwells on the events of the modern period. In the other divisions he pointed out only the event: now he must treat the subject more fully, stating causes and results, the influence of the events upon the people, and upon the growth of political institutions and administrations. The children must be familiarized with the names and lives of the great men who have made the country illustrious, and with what they accomplished in the domains of science, literature, and art.

History of the district. Pupils in the higher grammar grades should be taught the characteristic features of the history of their county or province, and the part it took in the national movements.

III.—The History Lesson.

Method of conducting the lesson. 1. Questions on the preceding lesson, and on the part of the programme already studied, in so far as they bear on the lesson of the day.

2. Concise explanation of the lesson of the day: attention directed to the important events and personages; ideas grouped into a synoptical plan on the board; wall charts, geographical maps, and engravings, used when necessary.

3. Explanation of the matter in the text-book.

4. Recapitulation, and indication of the lesson to be learned, or the exercise to be written.

Adaptation of the general method to the different divisions. The more advanced the pupils are, the more thorough the work ought to be; the facts dealt with should be more fully explained, and the pupils led to reflect and pass judgment on the actions and events.

Preparatory and primary grades. The teaching of history in these divisions should be by anecdotes, intuitive and pictorial. The teacher must endeavor to make the children understand that people did not always live and act as they do to-day. This simple fact will be grasped by means of stories and explanations of pictures.

The teacher relates the events in a lively conversational way, interspersing his narrative with many questions. The names of the leading characters, towns, customs, etc., are written on the board, as they occur in the recital of the lesson; this tends to captivate attention. When the narrative is ended, the pupils are asked to repeat it, first in parts, and then in its entirety. The lesson

ends with a few questions, followed by an explanation of the matter in the text-book.

Lower grammar grades. The lessons must never be an uninterrupted exposition of a subject; questions should be often asked, so as to excite the interest and intellectual activity of the pupils. Only the most important dates need be insisted on. After explaining the lesson in the book, the teacher reminds the pupils of the necessity of learning the summary word for word, and of reading several times the developments which accompany it, in order to be able to give an accurate account of the whole.

Higher grammar grades. The lesson might be given in the form of a lecture—narrative, explanatory, and reasoned—broken up frequently by questions. In preparing his lesson, the teacher collects and combines all the different elements relating to the same subject, to give his pupils general ideas on the facts. He need not give detailed descriptions of military expeditions or battles. The history lessons should treat mainly of the chief political transformations, the advance of civilization, social conditions, and rights.

Use of a text-book. The pupils should have a good history text-book, that they may acquire definite and connected ideas about events. The text-books ought to correspond with the different grades; and be *concentric*, that is, more or less developed according as the book is intended for primary, lower, or higher grammar grades. Such books are invaluable to the teacher, but they do not relieve him of the obligation of *teaching* the lesson himself.

The text-book may be used in either of the two following ways: 1. Having explained briefly the subject of the lesson, the teacher gets the pupils to read the portions which develop it. He explains obscure expressions, calls attention to events and celebrities, adds interesting details, questions the pupils, and then gets them to continue

the reading. When the lesson is finished, he questions on the matter explained, and points out the portions to be committed to memory. According to this method, the teacher gives only a very concise development of the subject, explains the terms used in the book, and adds some supplementary details.

2. The second method is to use the text-book only after the oral lesson and the questions of review following it. The text is read, and any expressions which the pupils do not understand are explained. The study and reading of a text-book do not constitute a lesson; they play but a secondary part in the teaching of history. Oral teaching is absolutely necessary.

Use of maps. Whichever method be followed in giving instruction in history, recourse must always be had to historical maps, or if these are not available, to geographical maps, in order to point out the towns and states forming the theatre of war, the provinces annexed or given up by treaties, and the geographical features, mountains, rivers, etc., that served as obstacles or helps to armies in campaign. If the geographical maps are too complicated, the teacher might draw, or have a pupil draw, a sketch-map on the black-board, and indicate thereon the leading features relating to the lesson of the day. Such an outline is clearer and more attractive for children. This preparation will take time, and may interfere with the supervision of the class; however, such inconveniences can be avoided, by preparing outside of class a very simple sketch, which an intelligent pupil can reproduce on a large scale on the black-board. Good text-books, especially those intended for the lower and higher grammar grades, should contain maps relating to the different periods of national history, and the children must be taught how to make use of them during study.

Recapitulations and reviews. If the teacher wishes to impress facts on the pupils' minds, he must have very frequent recapitulations. It is easier to retain what has once been learned than to recommence learning it anew.

At the beginning of each lesson, therefore, the teacher ought to question the pupils upon the subject-matter of the previous lesson; and occasionally on portions of the programme already studied. Sometimes the lesson may be devoted to a review of all the facts having the same cause, such as a long war, the work of some official or President, etc. A synoptical table, drawn up with the assistance of the pupils, and showing at a glance the details of an important episode, would be a great aid to the teacher.

Use of history for moral education. In the history of every nation there are glorious pages which ought to be singled out by the teacher. The examples of patriotism afforded in every age by the defenders of the soil, the great men, and the national saints, teach new generations to remember with gratitude such illustrious heroes. The pages of a nation's annals also contain various examples which may be useful in inculcating moral lessons. To the student history affords many more teachings. It shows how countries the most advanced in civilization have fallen, by giving up the worship of the true God; how others have become civilized through the influence of the Catholic Church; and how Jesus Christ is the central figure of humanity. It makes him grasp this two-fold truth, that the religious question sways the daily life of each individual, as well as the greatest events in the world; and that the divine plan is realized in every nation without infringing on the domain of man's free will. Such high lessons must be brought within the intelligence of the pupils.

IV.—Plans for Notes.

The particular form to be given to the plan or notes of a history lesson will vary according to the subject treated, the intelligence of the pupils, and the length of the lesson. Hence only general directions can be given.

Plan of a Lesson on a War.

- (a) Causes of the war.
- (b) Forces of the belligerent powers. Alliances, and short account of the negotiations which brought them about.
- (c) Narrative of the military operations, without going into details either about the campaign as a whole or particular battles.
- (d) Treaty of peace. Consequences of the war for the powers engaged.

Lesson on the Work of a Secretary of State.

- (a) Position of affairs when he took office.
- (b) The *man*; his character and abilities; how he was prepared for his work.
- (c) The *work*; examined from its various aspects; the results obtained by this Secretary of State in each of the great offices which he directed. His principal assistants.
- (d) Estimate of his character and the influence he exercised.

Unity of the lessons. The main facts connected logically with a certain event, or having the same cause, should be presented in the same lesson. It may be necessary to return later on and develop certain points. Thus, to give a general view of the war of the American Revolution, proceed as follows:

PLAN IN TEACHING.**War of the American Revolution.**

(Eighteenth Century.)

Causes.... { New king—taxes on colonies without their consent—cutting off our trade with all parts of the world—taking away our charters—Boston massacre, etc.

<i>Assemblies</i>	{	Virginia convention, "Give me liberty or give me death"—First Continental Congress—Philadelphia, 1774—"Minute Men"—Second Continental Congress—Philadelphia, 1775.
<i>Events before the Declaration</i>	{	Washington appointed Commander-in-chief of our armies—Lexington—Concord—Bunker Hill—Ticonderoga—Boston evacuated by the British.
<i>Declaration of War</i>	{	Philadelphia, 1776—Richard H. Lee moved "that the United Colonies are and of right ought to be free and independent States" (Adopted by the Convention)—Signers, fifty-six—John Hancock, President.
<i>Events after Declaration</i>	{	Long Island—Trenton—Princeton—Bennington—Valley Forge—Saratoga—"Bonhomme Richard"—"Alliance"—Surrender of Burgoyne—Arnold's Treason—Greene's victories in the South—Stony Point—Surrender of Cornwallis.
<i>Prominent Men</i>	{	George Washington—Patrick Henry—Benjamin Franklin—John Hancock—Robert Morris—Thomas Jefferson—Lafayette—Rochambeau—Kosciusko—Pulaski—Sullivan—Barry—Carroll—Wayne—O'Briens—DeKalb.
<i>Assistance from foreign Countries</i>	{	France and Spain. In what way?
<i>Results....</i>	{	Treaty of Peace—Signed at Paris, 1783—treaty secured to us about 800,000 square miles of territory and the respect of the entire world—a new era.
<i>Summary...</i>		<i>Note.</i>

The above may be modified to suit the classes taught. Sketches and location of important events, *viz.*, battles, routes of armies, etc.

To make history more interesting, anecdotes, stories, incidents of noted men and places mentioned should be told to the children. Thus they will easily remember the lessons given by the teacher.

V.—Civil Government.

History should not be limited to the narration of national events: pupils must be instructed in their duties and rights as members of the nation. When the constitution of a country allows all the citizens to take part, within certain limits, in public affairs, the children ought to know how the powers are organized, how the administrative functions are performed, the meaning of the right of voting, the duties of electors, etc.

The lessons in civil government may consist of statements and explanations; but teachers should avoid criticising the constitution and laws of the country. The method of teaching is similar to that employed for history, but more time is devoted to Socratic questioning. As far as possible, the instruction should be given in the concrete form; hence the teacher would do well to collect different documents, such as tax papers, licenses, rate papers, voting papers, etc., and preserve them in the museum. This instruction, being connected with history by the study of national institutions, and with political geography in what relates to the working of the different administrations, the teacher may give it during the history or the geography lesson.

CHAPTER VII.

GEOGRAPHY.

I.—Faculties and Principles.

Faculties to be developed. Geography may be descriptive, scientific, or historical. As a science it exercises *reason* and *attention*; and as a descriptive science, *imagination* and the sense of *sight*. *Memory* retains the acquired notions. Map drawing trains the *eye* and *hand*. The simultaneous exercise of these faculties concurs in the formation of the *will* by the development of religious, patriotic, and humane sentiments.

Principles to be followed. The teaching of geography should be made:

1. Intuitive, *i.e.*, definitions, terms, etc., used in geography should be explained by reference to the local landscape, and to botanical and geological specimens.
2. Rational, by the use of induction, deduction, and analogy: explaining the origin of deltas, deserts, and the course of rivers, and why certain industries are carried on in certain places; comparing the physical, political, and industrial conditions of other countries with those of our own, etc.
3. Practical, by accustoming pupils to draw sketches bearing on each lesson, examining memory lessons from a black-board sketch, to be filled in as the recitation proceeds.
4. Interesting, by arousing the curiosity of the children in sciences which bear on geography — geology, meteorology, botany. Hence the utility of excursions to factories, parks, caves, etc.
5. Moral and patriotic, by referring to the order of the universe and to national history.

II.—Suggestions Concerning the Method of Teaching Geography.

The lesson. Good teaching in geography is characterized by frequent Socratic questioning, and by the continual use of intuitive or concrete methods. The method of conducting the lesson will vary according to the subject: the orography or hydrography of a region, natural scenery and phenomena, political geography, etc. Excepting the modifications necessary in the primary grades, the following method may be followed in teaching physical geography:

1. Review of the preceding lesson. This is done by means of a skeleton map, or a sketch, if the pupils are able to draw on the board.
2. Explanation of the lesson before a map.¹
3. Questions on the subject of the lesson.
4. Indication of portion of the text-book to be studied, and the map-drawing exercise to be done.

The text-book, in the teaching of geography, is but of secondary importance; the teacher should prescribe nothing to be studied which he has not first explained, and, as far as possible, shown in the concrete. The exercise may consist in drawing a clean copy of the geographical sketches made during class, or a sketch which the pupil must make from his atlas according to prescribed conditions.

Geographical apparatus consist of views and relief maps, terrestrial globes, wall maps (blank or filled in), illustrated text-books, atlases, and map tracing-books.

Geographical pictures, views, and relief maps, serve as substitutes for the reality, and render the abstract notions concrete. They are very useful in making children realize geographical terms, the definitions of which are found in the text-book. Globes give a true idea of terrestrial forms, and of the position countries occupy with

¹ If the lesson is on a county, of which there is a separate wall map, the teacher should also show the map of the State to which the county belongs.

respect to one another; they are indispensable in explaining the poles, equator, longitude, latitude, ocean currents, motion of the earth, etc. Wall maps, on which the various geographical features and places are marked, can be used when giving lessons, and the blank maps when examining. Atlases are little used during the oral lessons; they should be used by the pupils at study time, and when making a clean copy of the sketches drawn during the oral lesson. The map tracing-books are used for marking the physical features as the teacher points them out during the course of the lesson; or as exercises for completion during study, according to the directions of the teacher; or for reproduction, first at sight and afterward from memory.

Map-drawing. The map sketches done by the pupils should fulfil the following conditions:

1. To be very simple as to form and drawing, not overcharged with names, and contain nothing about which the pupil cannot say something.
2. Never to be the countertracing of a map, nor a copy to the same scale.
3. To be drawn, if possible, with colored crayons or inks.
4. Drawing outline with a few details from memory.
5. Modelling maps from clay, or papier-maché, or sand.

Details and nomenclatures. The short time devoted to geography, and the necessity of giving pupils vivid impressions and exact ideas, compel the teacher to limit his explanations during class to characteristic details and indispensable nomenclatures. Those which appeal to the memory only, as, for instance, long lists of towns, rivers, etc., ought to be omitted. The teacher should point out on the map whatever places he is speaking of, give the necessary explanations concerning them, and send the pupils to a blank map for examinations and recitations.

III.—Geography in the Different Divisions.

Primary classes. The programme of the primary classes comprises the study of geographical terms. These terms should be explained by local examples, otherwise the children will find much difficulty in understanding and remembering words which are new to them. It is not advisable to introduce abstract terms, such as latitude and longitude, when teaching very young children. The administrative divisions of the county in which their city or town is situated should be briefly explained; afterward some general ideas of national and universal geography might be given.

Geographical terms. A child should never be made to learn geographical terms until they have been explained by concrete representations. The chief geographical features may be shown on relief maps or by panoramic views. It would be waste of time for a child to learn a number of terms that do not call up the reality before his mind. The most rational and efficacious process is to instruct the child by making him observe the country around him. There are few localities where one cannot point out a hill, a river, etc., which will help to make pupils realize other geographical features not seen in the district. When the neighborhood does not contain an example, the teacher may make a model with potter's clay or moist sand, which can be speedily manipulated before the class. Having explained to the pupils a geographical term, the teacher should indicate on the board the way it is represented on the map. These black-board sketches may be reproduced in the map tracing-books.¹

District and county geography. To accustom the children to read maps and draw sketches, the teacher might begin by making on the board a plan of the classroom. A child measures the dimensions of the room; the teacher writes them on the plan, and points out the

¹ Magic-lantern views would make the teaching very interesting.

proportion which exists between the line of the plan and the real length it represents. He shows on the plan where such a door or window ought to be placed. This work is done with the assistance of the children. The teacher directs and questions them, and by so doing stimulates their faculties of observation and reflection. The exercise terminates by a reproduction on slate or copybook of the sketch on the board.

At another lesson, a line representing the principal street in the city or town is drawn. A pupil is called on to draw a second, and a third. Then the positions of the school, the church, the town-hall, the railway station, etc., are indicated. The plan may be kept and continued at the next lesson. It should be very simple, containing nothing but what is useful in attaining the end in view. At the next lesson the plan may be enlarged, and the woods, the river, the pond, etc., which are near the town and which the children know, may be introduced. In studying the district, counties, and States, it would be well if the teacher himself sketched the necessary maps. These need contain only the important features and places; they will thus be much clearer and more readable than printed maps.

As soon as the pupils have passed to the primary grades, they may be exercised in map-drawing. This work is to be done under the teacher's supervision; and he should assist the children in their first attempts, by suggestions as to the practical means for simplifying the work.

Lower grammar grades. In these grades the children should study the national geography, with some general ideas of America and the other parts of the world; but only the most important portions need be dealt with, leaving the more complicated parts for the higher grammar grades. The teaching must preserve its concrete character. For example, in a lesson on the *orography of a country*, while the teacher names the mountains and explains their position, one pupil might point them out on the wall map, while another marks them on a black-

board sketch, which he fills in as the lesson proceeds. The same drawing may be afterward executed by all the pupils on their slates or copybooks. When the sketch is finished, the teacher may give some interesting details on the formation of mountains, their utility, the part a certain chain or group plays in the defence of the country, etc.

These statements awaken the curiosity of the children, and help to impress on their minds the subject of the lesson.

With the assistance of the text-book, and the atlas, the pupils study the lesson explained, and are thus able to show the places on the blank map. From time to time, during the recitation, the teacher may get them to draw a sketch indicating the necessary features of a part or of the whole of the lesson.

A lesson *on rivers* may be given in a similar manner. The important rivers only should be indicated, and the towns that are remarkable for population, industry, or historical associations. A few facts about each of these may be necessary, and would interest the pupils.

Higher grammar grades. In this division the programme of geography comprises the review of the national geography, which is completed by a more detailed study. The geography of the colonies is added, as well as some idea of the physical and political geography of Europe, and other parts of the world. The methods of instruction are similar to those in the preceding divisions, but the sketches should be more detailed. Without entering on scientific explanations, the teacher explains some of the causes of the physical phenomena he treats: origin of the globe, formation of mountains, erosion of valleys, etc.

Geography and history combined. Geography and history mutually aid each other in teaching. Thus: Philadelphia, Independence Hall, the Declaration of Independence. Boston, the Tea Party. Yorktown, the Surrender of Cornwallis. Manila, defeat of Spanish navy by Admiral Dewey. St. Helena, the exile of Na-

poleon. In sacred history: Rome, the sufferings of the early Christians. Palestine, history of the Holy Family. Egypt, Pharaoh, Moses, Israelites, and Joseph.

Compare area and population of State or country in which you live to another State or country; *viz.*, United States with Europe; Texas with France; New England States with Missouri; England with Illinois, etc. Also have pupils compare countries and bodies of water to objects whose outlines they resemble; *e.g.*, Cuba to an alligator; South America to a dog's head; Italy to a boot; Japan Sea to a rabbit.

By geography we know the general character of people; the nature of their occupations, whether agricultural, industrial, or commercial; their foreign relations, especially before the use of the modern system of rapid transit; the direction taken in great invasions, etc. On the other hand, by connecting known historical occurrences with certain places, the teaching of geography becomes more useful and interesting. Without transforming a geography lesson into one on history, the teacher can complete each subject by points common to both.

IV.—Plan of Lessons.

The lessons in geography should not be a mere commentary on the text of the manual. It is absolutely necessary for the teacher to prepare his lessons—have relief map, chart or sketch on black-board for the pupils.

The geography of North America is supposed to be known by the pupils. Have them name or point out on the map, the political divisions of North America, the waters surrounding it, principal mountain ranges, principal rivers. Then, for instance, take the United States, excluding its colonies, and compare it to the neighboring divisions, or to the different other countries, as to area, elevation, climate, natural resources, commerce, industries, population, language, religion, names of the various States and principal cities, then, travelling from your own city to any other city, by rail, by water, naming direction,

and, if by rail, principal cities and States passed through, e.g., by boat, from Boston to St. Louis; by rail, from New York to Chicago, going by way of Washington.

Plan of a Lesson on a State.

<i>Territory...</i>	{	Boundaries of the State (sketch), area, population; position of State with relation to the United States.
<i>Surface....</i>	{	Physical features: mountains, hills, valleys; general slope, direction of the rivers, climate.
<i>Water</i>	{	Rivers, lakes, canals, irrigation and drainage; coast line, if any; commercial advantages the water gives to the State.
<i>Means of Transit</i>	{	Principal public roads, railroads; advantages of these roads to the State, regarding small towns and cities.
<i>Soil</i>	{	Character of the earth; mines, quarries; name different mineral and agricultural products found in the State and in what part.
<i>Industries..</i>	{	Principal industries; where products are chiefly sent.
<i>Government</i>	{	Administration; legislative, judicial, and ecclesiastical.
<i>Cities.....</i>	{	Location; commercial or other advantages, if any.
<i>Historical Associations</i>	{	Discovery; explorations and other historical events; celebrated men, etc.

The above plan may be adapted to suit the study of a section of a State or of a country; but as the territory becomes extended, the minor details should be omitted.

Plan of a Lesson on a River Basin.

Physical aspects of the basin. Situation, extent, limits, geological nature of the country drained by the river and its tributaries (sketch). Direction of slope of the country, and the obstacles which change or direct the course of the river (profiles).

Course of the river. Source, course (sketch), cities, mouth.

Tributaries. Considerations analogous to the preceding, but shorter.

Regions. Indication of countries through which rivers flow.

Plan of a Lesson on the Commercial Geography of a Country.

Agriculture. Review of the geological, climatic, and hydrographic conditions of the country.

Vegetable and animal products. Trees, alimental crops, artificial and natural grasses, industrial crops. Animals, fisheries, game.

Industry. Summary study of the mineral, vegetable, and animal productions; corresponding industries.

Commerce. Ways and means of transit: roads, railways, canals, harbors, telegraph and cable systems. Exchanges: home and foreign trade; imports and exports (graphic statistics).

Colonies. Resources, relations with the mother-country, and with other nations.

Special attention should be paid to the recently acquired colonies of the United States.

CHAPTER VIII.

ARITHMETIC.

In elementary schools instruction in arithmetic includes: (1) Oral and written calculations; (2) mental arithmetic; (3) definitions and demonstrations, the usual subject of the oral lesson; (4) analysis and solution of problems.

I.—Faculties and Principles.

Faculties to be developed. To know numbers a person must be able to perceive relations of similarity and magnitude with respect to the unit—*comparison* and *judgment*. The senses of sight and touch help in the acquisition of general and abstract ideas of numbers—*intuition* and *abstraction*. *Generalization* and *reasoning* are used in definitions and the solution of problems. And the continued application of these faculties to the object of their activity exercises *attention* and *reflection*.

Principles to be followed. Arithmetic must be taught:

1. Intuitively, by means of ball-frame, sticks, cubes, etc.

2. Rationally, and not empirically. As the study of this subject depends chiefly on reason, the why and wherefore of each step should be shown. However, the amount of theory will depend on the age and intelligence of the pupils.

3. Practically: quickness and accuracy in the simple rules must be first attained; and the problems must be instructive. For these ends, questions bearing on geography, lengths, and populations; history, difference of time between events; cost of certain expensive habits, abuse of alcoholic drinks, etc., may be proposed.

4. Methodically and clearly. The ideas should follow each other in generic sequence; thus addition leads

through cumulative addition to multiplication, and subtraction to division.

II.—Oral and Written Calculations.

Mechanism of the four fundamental operations.—In order to lead pupils to calculate rapidly and correctly, they should get a great deal of practice in the lower classes. Even in the higher grammar classes, it is useful to devote the first few minutes of the lesson in arithmetic to mechanical calculations, such as, rather complicated questions in addition, multiplication, or division. The award of a good mark to the pupils who get correct answers first, arouses emulation among them, and insures success.

As soon as pupils begin arithmetic, they should get a practical knowledge of numeration and notation; otherwise, some might know the mechanical working of the four rules, without being able to write down numbers dictated by the teacher. Such pupils could not be exercised in mental arithmetic. It is, therefore, far better to dictate the exercises than to allow the children to copy them from their books. Arithmetic manuals are useful for prescribing exercises for home and desk work.

Addition. It is important that children acquire rapidity and accuracy in addition. Beginners should first be taught to *count*, *read*, and *write* numbers, decade by decade, up to 100. They might then be got to name them two by two, three by three, five by five, etc.; but mentioning always the constant number added to obtain the next, thus:

2 and 2.. 4 and 2.. 6 and 2.. 8 and 2.. 10 and 2.. 12
3 and 3.. 6 and 3.. 9 and 3.. 12 and 3.. 15 and 3.. 18
5 and 5.. 10 and 5.. 15 and 5.. 20 and 5.. 25 and 5.. 30

Simultaneously with these preliminaries, the teacher may get short additions worked on the board. A column of figures is written, and the pupils in turn add them, first upward, then downward, the exercise being

lengthened according to the progress of the pupils. From time to time, one figure in the column should be replaced by another.¹

The teacher might show during the black-board work that the last figure of an addition is determined by the last figures of the numbers which have been used in forming it. He may make the pupils observe, for instance, that:

3 and 4 are 7
13 and 4 are 17
23 and 4 are 27, etc.,

and that the three answers end in 7, formed by 3 and 4. Gradually the children become familiar with this induction and will profit by it. This is an excellent practice.

Subtraction. Subtraction presents little difficulty to a child who knows addition; when he says that 5 and 4 are 9, it is easy to make him understand that if from 9 one takes either of the numbers 5 or 4, the other remains. In the first exercises the figures in the minuend should all be greater than their corresponding figures in the subtrahend. At the next lesson the minuend might contain some figures smaller than the corresponding figures in the subtrahend. Later on greater difficulties are introduced, for example, two or three noughts in succession in the minuend. The pupils ought to be accustomed to prove the subtraction either by addition or by another subtraction.

Multiplication. The pupils should study the multiplication table by heart, but the teacher need not wait till they have mastered all the table, before giving multiplication exercises. They can begin little operations as soon as they know the product of the first nine figures by 2. According as they learn the tables, they may em-

¹ Another way of giving practice in addition is to arrange the digits in a circle: a pupil begins at any figure and adds as the teacher points around the circle. This method affords great variety, and quickly discovers the difficulties of the pupils. The teacher should note these difficulties, and give exercises on them.

ploy other figures as multipliers. When the pupils thoroughly know the products of the first nine figures, they may be exercised in varied multiplications.¹ In preparation for this, they may go through a few special exercises. The teacher writes the first nine figures in any order in a horizontal line on the board, thus:

1 9 8 2 3 7 6 4 5

He then writes underneath these a multiplier, for instance, 4. Each pupil gives the product of one number, without, however, setting down the result, or noting the tens carried. After three or four tests with the same multiplier another is substituted, and the products found in the same manner.

Remark. In the lower and higher grammar grades it will be found useful for the pupils to know the squares of 11, 12, 13, 14, and 15, etc., as also the products of these numbers by 2, 3, 4, 5, 6, 7, 8, and 9.

Division. A pupil who knows the multiplication tables thoroughly will find division very easy. He knows, for instance, that 6 times 7 are 42; then he can be made to understand without much difficulty that 42 contains the number 6 seven times, or the number 7 six times. The following progressive steps will help a child in mastering division.

1. Division without a remainder, with one figure as divisor, and one in the quotient. The problem ought to be worked first orally, then on the board. Example: How many times is 4 contained in 20? How many times is 9 contained in 54?

2. Division with a remainder, having one figure in the divisor, and one in the quotient. As in the preceding exercise, the question is done orally first, then on the board. Example: How many times is 4 contained in 13? How many times is 9 contained in 68? Each time attention is drawn to the remainder.

¹ A good test is to get two pupils facing each other to recite aloud different tables, say 4 times and 7 times; if these are *thoroughly* known the pupils will not break down.

3. Division with one figure in the divisor, and several figures in the quotient. Here, new and somewhat serious difficulties occur when the first figure of the dividend is smaller than that of the divisor, or the partial dividends smaller than the divisor. The quotients need not always be whole numbers; the decimal point may be inserted and the operation continued.

Remarks. 1. Children should make use of correct terms in calculating, and not employ useless expressions.

2. Neatness, method, and well-formed figures must be insisted on.

3. The results ought generally to be proved.

III.—Mental Arithmetic.

Nature and importance. The term mental arithmetic is applied, not to work done from memory according to the processes employed in written arithmetic, but to mental calculations performed by decomposing the numbers on which the operations are to be effected. Such calculation is not a branch independent of arithmetic; and mental exercises on operations and problems analogous to those done in writing should be worked in all the classes.

The importance of mental arithmetic is unquestionable, from an educational and a practical point of view. Provided pupils understand the methods they employ, mental arithmetic gives intellectual drill of the best kind. It leads children to reflect and reason without the aid of objects; helps to make them accurate and precise; and accustoms them to discuss mentally the method of solving a problem, before working it on paper. It is of constant use in daily life.

Preparatory and primary classes. In the preparatory classes mental exercises are confined to the addition and subtraction of numbers of two figures, or at most three; but it is necessary to interest the pupils, and for this rea-

son merely abstract numbers should never be used, but numbers of apples, nuts, sweets, marbles, etc.

In the primary classes a few minutes should be devoted daily to mental arithmetic. Problems to be worked on the black-board may be preceded by an oral problem, solved mentally, in which the same question is asked in different terms; but in order not to weary the children, very large numbers must not be used.

Lower and higher grammar grades. In the lower and higher grammar grades the processes which lead most quickly to correct results should be taught. Thus to add 257 to 138, the pupil decomposes the figures mentally into hundreds, tens, and units; 200 of the first number and 100 of the second are 300; 50 of the first and 30 of the second are 80; in all 380, to which 7 and 8 are added to make 395.

Similarly, to multiply 28 by 150, 28 is multiplied by 100, which gives 28 hundreds; to this product is added the half of 28 hundreds, which gives a total of 42 hundreds, or 4,200. To multiply a number by 99 or 101, it is first multiplied by 100; then to the product, once the number is either added or subtracted. To multiply a number by 109 or 111, it is multiplied first by 100, then by 10, and once the number is taken from or added to the sum of the two products. To multiply a number by 25, it is multiplied by 100, and the fourth of the product is taken; or better still, the fourth of the number is multiplied by 100. To divide a number by 25, it is divided by 100 and the quotient multiplied by 4.

If the interest on a certain sum is to be found, for example, \$8,000 at 5 per cent. for 3 months, the pupils may reason thus: In one year each \$100 gains \$5, and 80 hundreds would gain 80 times \$5. But 3 months represent a quarter of a year, the interest required is then the quarter of 80 times \$5, or 20 times \$5, *i.e.*, \$100. If the rate be 4 the question is still more simply solved: \$100 would gain \$1 in 3 months, and the 80 hundreds would gain \$80.

These examples suffice to show how pupils may be accustomed to operate mentally on numbers. Having put the question to the whole class, the teacher gives the pupils time for reflection, and then asks the answer from one, two, three, or four of them, requiring an explanation of the processes employed.

Remarks. 1. In order that the questions may follow one another without delay, the teacher should prepare beforehand.

2. It is desirable that the exercises of each day relate to a given rule, which would form the pivot of the lesson; and that these exercises be followed by written problems, in which the ideas used in the mental calculations appear.

3. Sometimes all the operations may relate to one principal question, so that, several numbers being constant, the attention of the pupils may be less fatigued. Thus in the higher grammar classes, the following series of calculations may be performed on the constant numbers 3 and 2: A rectangular box with a lid, measures 3 feet in length, 2 in width, and 2 in height. Find: (1) the number of edges; (2) the total length of these edges; (3) the area of each face; (4) the total area of the faces; (5) what it would cost to cover the box with cloth at 2 cents per square inch; (6) the volume of the box in cubic inches.

IV.—Lesson in Arithmetic.

Preparatory classes. In the preparatory classes, the lesson in arithmetic comprises two parts:

1. Simple ideas of notation, taught by concrete processes.

2. Exercises in the four rules.

The child is first taught how to *distinguish*, *count*, and *write* the first ten numbers, and he is given an exact idea of them by means of objects.

Using the Abacus.

Abacus, or ball-frame. The abacus is an apparatus composed of a frame, in which are set ten parallel iron wires, each having ten movable balls of various colors. It is an indispensable instrument in the lower classes, for the purpose of giving the younger pupils a knowledge of the formation of numbers, and supplying a means of exercising them in the four fundamental rules.

To teach the formation of numbers from 1 to 10, move one ball. This gives an idea of the number *one*. To form two, move one to the side of the first. This gives an idea of the number *two*. Another ball added to this gives *three*, etc. The formation of *tens* and the subsequent numbers may be explained by means of the ten balls on each wire. Thus, the balls on one wire form *ten*, those on two wires *twenty*, etc. To form the number 37, we move all the balls on the first three rows, and 7 balls on the fourth. It is thus easy to see that 37 is composed of 3 *tens* and 7 *units*.

Addition. If we wish to add 5 and 2, we first take a group of 5 balls and another of 2. Joining these two groups we obtain the number 7. Hence 5 and 2 are 7. We may, in like manner, show that 8 and 6 make 14.

To add the numbers 4, 3, 7, and 5; take 4 balls on the first row to form the group of 4; then 3 for the group of 3. To form the group of 7 take the remaining 3 of the first row, and 4 of the second; then add 5 to form the last figure. Joining these we have 19.

Subtraction. To subtract 3 from 8, form a group of 8 balls, and separate 3, showing that 5 remain; hence 3 from 8 leave 5. In the same way show that 15 from 27 leave 12.

Multiplication. To multiply 6 by 5, form a group of 6 balls on each of the first five rows, and by addition show that 5 times 6 are 30. When each group of six is formed a ball might be moved on one of the lower rows to show when 5 groups of sixes are formed.

Division. To divide 25 by 5; count off 25 balls, from these 25 balls count off 5 at a time, as often as possible; taking care to move a ball on one of the unused wires, every time a five is counted. Then it is seen that after 5 operations nothing remains. Therefore 25 contains 5 five times.

To divide 29 by 5 we proceed in the same way, noting that after 5 operations, 4 balls remain. Hence 29 contains 5 five times, with a remainder of 4.

The majority of oral exercises in the four rules may be taught by means of the ball-frame.

If there is not a ball-frame in the school, small cubes may be used to represent units, and sticks equal in size to ten cubes to represent tens. Showing one cube to the pupils, the teacher writes a large figure 1 on the board, and gets the children to make the same figure on their slates or exercise books. He adds another cube to the first, making 2; this number he names and has named, writes it on the board, and has it copied. He then passes on to 3, 4, etc., thus showing in a concrete manner how the numbers from 1 to 10 are formed.

Instead of representing 10 by ten separate cubes, the teacher might place them close together in a row, glued on a piece of canvas; this arrangement would make the child understand better the idea of *ten*. Ten similar rows form 100. Other objects, books, slates, etc., might also be counted; and thus the children will understand that a person may have a number of other things, as well as of cubes. The teacher then forms the numbers of the second decade, 11, 12, 13, etc., with the help of a *ten* row, to which he adds one, two, three . . . blocks successively. To form the numbers of the third decade he adds to two rows, one, two, three . . . blocks; and obtains 21, 22, 23, etc.; which he names and writes, and gets the children to name and write. The children soon perceive that the last figure of the number represents the single blocks, and the first the rows; that is, the one, units and the other, tens.

One form of recreative exercise for teaching young

children to count consists in giving to each a small box containing a hundred pieces of thin cardboard, all of equal size and similar shape. Each child counts them by tens, and places them in rows before him. At a given sign from the teacher, the children make up little piles, each containing ten pieces of cardboard, which they put back, pile by pile, into the box. When putting them back, they count aloud: one ten, two tens, . . . nine tens, ten tens, or one hundred. The teacher collects one by one the little boxes; places them in a larger box which bears the name of *thousand*, and counts aloud, one hundred, two hundred . . . ten hundred or a thousand. When this exercise is finished, a number of three figures might be written and represented concretely. The number 234, for instance, is represented by 2 boxes, 3 piles of cardboard, and 4 separate cards.

Calculations with abstract numbers should be avoided in teaching young children. The following are a few of the means which might interest them: A foot-rule is shown, and the children are taught the use of it, by measuring the length of the class-room, and getting them to count, one foot, two feet, three feet, etc.; the number is then written on the board. The width of the room is measured in the same way, which gives a second addend. These dimensions are repeated and the total is found. The result is verified by measuring successively the four walls of the class-room. At the next lesson feet of linen, thread, etc., are added and subtracted; at another lesson, the numbers may represent pennies. After explaining what a gallon is, the calculations may be performed on gallons of water, oil, etc.

Primary classes. In the junior, as in the preparatory division, the arithmetic lesson consists of two parts: first, explanations of numeration and notation, the rules, and easy tables; second, exercises, either oral or written.

Numeration and notation. It is necessary to return frequently to notation, and to insist on the reading, writing, and calculation of whole numbers and decimals.

When the formation of numbers up to 1,000 has been studied by concrete methods in the preparatory division, the pupils will easily understand that one counts by thousands as one has counted by units; that we can have units of thousands, tens and hundreds of thousands; that the units of thousands are written in the fourth place counting from right to left, the tens in the fifth, and the hundredths in the sixth. When, for instance, the teacher dictates 45,305, a pupil questioned, should say that the 4 represents tens of thousands, and that it is written in the fifth place, etc.

For decimals, the teaching should be confined to tenths, hundredths, and thousandths. However, a simple explanation would suffice to guide the pupils if they have other denominations of decimals to write. If, for instance, 25 units, and 328 hundred-thousandths are to be written, the teacher asks how many noughts in 100,000; when the pupil answers *five*, the teacher points out that the figure 8 of the hundred thousandths ought to occupy the *fifth* place after the decimal point, and consequently, that two noughts must be placed after the decimal point, thus: 25.00328.

Explanations on the four fundamental rules. The explanations on the four rules, and especially on multiplication and division, should be given little by little, graduating the difficulties. (Definitions ought always to follow, and not to precede the explanations. The pupils must be first made to *understand*, then *formulate*, and afterward *learn* rules and definitions.)

If the teacher wishes to explain the use of multiplication, he may give examples like the following: *A workman earns \$2.00 a day; how much will he have earned at the end of 5 days?* The pupils are led to reason as follows: in one day, the workman earns \$2.00, in two days, twice \$2.00, in five days, 5 times \$2.00. A pupil goes to the board and writes five times in a vertical column the number 2, and adds up. The teacher makes him remark what a long addition problem would

result if he had to find out the earning for 20, 50, or 80 days, and tells him that there is a shorter way than by repeating so often the number 2. Then he explains that by multiplication we can repeat one number as many times as there are units in another number. After some examples the teacher gives the necessary explanations of the terms *multiplicand*, *multiplier*, *product*; then formulates the definition of multiplication, and has it repeated by a certain number of pupils.

Problems on the four rules. Tables. If the question is asked: *How many yards of muslin, at 8 cents a yard, can I buy for 72 cents?* the pupils should not be permitted to answer *a priori*: "*It is done by division.*" This mode of answering would not imply reasoning; besides, the answer is often in such cases given hap-hazard, or by analogy with exercises previously done. The pupils ought to be taught to reason as follows: "With 8 cents, I can buy one yard of muslin; with twice 8 cents, I can buy two yards; with three times 8 cents, three yards. . . . I shall have as many yards of material as 8 is contained in 72." In the first lessons the pupil should finish by stating: "The operation by which I find how often one number is contained in another is called division."

With the pupils of the primary classes, the teacher need not go beyond the easy tables of weights and measures, money and time. The measurements of surface and volume can be dealt with in the lower grammar classes. The explanations of the different tables should be given by means of concrete illustrations; coins might be used in teaching the money table; a seconds-pendulum for the time table; foot and yard measures for long measure, etc. To show objects, and let the children handle them when necessary, simplifies the teaching, makes it more agreeable, and tends to impress the facts more deeply on their minds.

It will be found useful also to give primary pupils elementary notions of *common fractions*. Some knowledge of them is necessary; for, in mental arithmetic, the pupils

must know how to find the half, the third, and the three-fourths of a number. An easy method of explaining fractions is to represent the unit by a line, which can be divided into a certain number of equal parts, 5, for instance. A thicker stroke on the first two or three parts marks the portion of the line required. This graphic process shows on the line itself the meaning of the numerator and denominator of a fraction. An inverse method may also be followed: the fraction is given, and then represented concretely on the black-board. The nature of fractions may also be explained by means of fruit, small rods of wood, or anything else that can be easily divided.

Remark. The teacher should give these explanations at the beginning of the lesson, when the children are fresh. He need not spend much time at them; but before going on to another branch of the programme, he ought to ascertain whether what has been explained is thoroughly understood. For this end, he might question the backward pupils rather than the more brilliant ones.

Lower grammar and higher grammar classes. In these grades the teaching in arithmetic preserves its practical character; but it should exercise more and more the reasoning and reflective powers of the children. The lesson may be conducted on the following lines:

1. Questions are asked on the preceding lesson, and exercises are done on the board, particularly when that lesson explained principles which are to be made use of in the lesson of the day.
2. New lesson is explained; the teacher, by means of Socratic questions, getting the pupils to take part in it.
3. Typical exercises are worked on the board and in the exercise books.
4. Work to be done in school or at home is given; generally a problem of a practical nature, making use of data borrowed from every-day life.

V.—Problems.

Choice of problems. The teacher should exercise much discernment in selecting problems from books of miscellaneous examples. The questions must be more or less complicated according to the age and intelligence of the children; more or less numerous on the same subject, according to the time which can be given to instruction in arithmetic. These questions ought to be worked out by the teacher himself, before proposing them to the pupils, to avoid hesitation and want of clearness when explaining. The best collection of problems is that which a teacher composes himself, and which he improves from year to year, by adding new questions selected from books and school reviews. If he compose the problems himself, he should be careful that the results be correct, and not a contradiction of the nature of things or the customs of life.

For pupils who are to leave school at about thirteen years of age, it is not advisable to spend time in solving complicated problems, which are good, doubtless, as intellectual exercises, but are not practical. Problems bearing on domestic economy, or connected with industrial or agricultural life should be chosen in preference. It is also a good moral training for pupils to calculate the cost of certain habits, as, for instance, the use of tobacco, alcoholic drinks, etc.; or to estimate the gain resulting from order and temperance.

Solution of problems. Specimen or typical problems should be specially explained by the teacher. They must be written on the black-board, with the important data underlined; the attention of the pupils is then directed to the unknown quantity; and, by a logical series of questions, the teacher leads the pupils to the right solution. These problems might be transcribed, and kept for reference during home and desk work. For young children the data of problems given as exercises should at first be almost the same as those of

the examples solved on the board; they might differ only in the figures.

It is very important that the pupils thoroughly understand and memorize the typical problems. They must be accustomed to read attentively, and reread several times an enunciation, before beginning the solution. Written solutions ought to be generally required, and from time to time, some of these may be reproduced on the board, either to show their correctness or to point out errors. When the problem is an important one, the teacher, having explained it, should have it written neatly and correctly on the board as a model.

Sometimes, particularly in the higher grammar classes, directions might be given for the solution of problems by means of algebraic notation. After exercises in cancelling, resolving of numbers into their factors, etc., the teacher may pass to simple equations of one or more unknown quantities, and thus deduce an easy method of solving certain questions, difficult to work by arithmetical processes.

Hints to be given to pupils on the solution of problems. Pupils are generally inclined to begin the solution of a problem without duly reflecting on the method; and having done the work, they do not examine whether the answer is reasonable or in accordance with the result that might be expected. They should be warned against precipitation. With this object, the following suggestions might be given from time to time:

1. As soon as the problem is given, to read the data and ask themselves: *What is required?*
2. To seek out carefully the method of finding what is required; to work attentively, and moderately slow.
3. In writing the solution, to begin a new line for each different step, so that the reasoning may be easily followed; to do the rough calculations on the portion of the page set aside for that purpose.
4. To satisfy themselves that they have followed a correct method by examining whether the answer is probable and in harmony with the data.

VI.—Solution of Problems.

The teacher should not wait until the pupils know the four rules perfectly before initiating them into the method of working problems. As soon as they know addition and subtraction, he may show them how to solve questions in these rules; but their work would be purely mechanical if they were not trained to reflect on the data, and reason on the problem.

Having dictated and written on the black-board the data of a problem, the teacher should question the pupils: (1) On what is required, or what they must find; (2) on what is given; (3) on the operations to be performed. They are thus made to reflect on the end to be attained. When the problem has been reasoned out in this way, the teacher has the solution written on half the black-board, or copybook, and the calculations on the other half. The solutions and operations may be arranged thus:

Primary Classes.

1. Question.	Example.
How do you verify the answer in subtraction?	From 18,574 apples take away 7,928.
<i>Answer.</i> To prove a question in subtraction, the subtrahend and the difference are added together, and the sum must be equal to the minuend.	$ \begin{array}{r} 18,574 \\ 7,928 \\ \hline 10,646 \\ 7,928 \\ \hline 18,574 \end{array} $
2. Problem. John had 175 marbles, he won 28, and then lost 52. How many has he remaining?	
Solution.	Operations.
Total number of marbles:	$ \begin{array}{r} 175 \qquad 203 \\ 28 \qquad 52 \\ \hline 203 \qquad 151 \end{array} $
$175 + 28 = 203$	
$203 - 52 = 151$	
Remainder.	

*Grammar Classes.***1. Question.**

How is a whole number multiplied by 10, 100, 1,000, etc.?

Ex. Multiply 345 by 100.

Answer. A whole number is multiplied by 10, 100, 1,000, etc., by writing one, two, three noughts to the right of the units figure.

Reasoning.

To multiply 345 by 100, I add two noughts to the right of the 5, and I get 34,500, which is a hundred times greater than 345.

The first number represented 345 units, while the second represents 345 hundreds.

2. A sum of \$18,420 was divided among four persons. The first received \$4,375; the second received as much as the first and \$450 besides; the third received \$3,500 less than the other two together; how much remained for the fourth?

Solution.

The 2d person's share:

$$4,375 + 450 = 4,825$$

Sum of the first two:

$$4,375 + 4,825 = 9,200$$

The third person's share:

$$9,200 - 3,500 = 5,700$$

Total of the first three:

$$9,200 + 5,700 = 14,900$$

Hence the fourth person received

$$18,420 - 14,900 = \$3,520$$

Answer. \$3,520.

Operations.

$$\begin{array}{r} 4,375 \\ 450 \\ \hline \end{array}$$

$$\begin{array}{r} 4,825 \\ 4,375 \\ \hline \end{array}$$

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Higher Grammar Classes.

1. The product of two numbers was increased by 1,260, by adding 2 to the multiplier and 5 to the multiplicand. Find the multiplicand, if the multiplier is 65.

Solution.

The product was increased by 5 times the multiplier or 325, plus twice the multiplicand, plus 2×5 or 10.

Hence twice the multiplicand equals $1,260 - 335 = 925$.

Once the multiplicand is $925 \div 2 = 462.5$.

Operations.

$$65 \times 5 = 325$$

$$5 \times 2 = 10$$

$$335$$

$$1260$$

$$335$$

$$925 \div 2 = 462.5$$

Remark. By using algebraic symbols the reasoning in this problem is at once made evident.

2. If 24 men can dig a ditch in 14 days, how long will it take 21 men to dig it?

Operation.

If 24 men can dig a ditch in 14 days,

1 man	"	"	$14 \times 24 = 336$ days.
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$$14 \times 24$$

$$21 \text{ men} \quad " \quad " \quad = 16 \text{ days, Ans.}$$

$$21$$

Solution. Arrange the statement so that what is required may come last. Thus, if 24 men can dig a ditch in 14 days, 1 man will require 24 times as many days, or 24 times 14 days = 336 days. And if 1 man requires 336 days to dig a ditch, 21 men will require 21 times less, or $\frac{336}{21} = 16$ days.

3. What is the exact interest of \$670 from March 10, 1885, to June 1, 1887, at 8%?

Operation.

$$\begin{aligned}
 \$670 \times .08 &= \$53.60 \text{ Int. 1 yr.} \\
 \$53.60 \times 2 &= \$107.20 \text{ " 2 yrs.} \\
 \$53.60 \times \frac{83}{365} &= 12.18 + \text{" 83 da.} \\
 &\underline{\hspace{1.5cm}} \\
 & \$119.38 + \text{Ans.}
 \end{aligned}$$

Solution. The in-

terest of \$670 for 1 year, or 365 days, at 8%, is \$53.60, and the interest for 2 years is \$107.20. From March 10th to June 1st there are 83 days. And if the interest of \$670 for one year is \$53.60, for 83 days it is $\frac{83}{365}$ of \$53.60, which is \$12.18. Hence the entire interest equals \$107.20 + \$12.18 = \$119.38 +.

4. Two persons engage in trade and gain \$660. A puts in \$400 for 3 months; and B \$500 for 2 months; what is each man's share of the gain?

Operation.

$$\begin{aligned}
 \$400 \times 3 &= \$1,200, \text{ A's capital.} \\
 \$500 \times 2 &= \underline{1,000}, \text{ B's " } \\
 & \$2,200, \text{ entire " } \\
 \frac{1200}{2200} &= \frac{6}{11} = \text{A's share.} \\
 \frac{1000}{2200} &= \frac{5}{11} = \text{B's share.} \\
 \$660 \times \frac{6}{11} &= \$360, \text{ A's gain.} \\
 \$660 \times \frac{5}{11} &= \$300, \text{ B's " }
 \end{aligned}$$

Solution. The

use of \$400 for 3 months is the same as the use of \$1,200 for 1 month; and \$500 for 2 months is equivalent to \$1,000 for 1 month. Thus the original investments for unequal periods of time are made equivalent to other investments for equal periods of time. The rest of the solution is the same as in Case I.

RULE. *Multiply each partner's investment by the time it was employed, and divide the gain or loss in proportion to the respective products.*

CHAPTER IX.

ELEMENTARY GEOMETRY AND MENSURATION.

Instruction in Preparatory and Primary Classes. Examples of Instruction in Lower and Higher Grammar Grades.

In primary classes, instruction in geometry is generally limited to a few simple practical principles, which do not require geometrical demonstrations strictly so called. In the lowest divisions, this instruction is partly included in drawing; it consists chiefly in *showing* something, *naming* it, and *drawing* it.

The lower classes. For young children, a thread represents a line; a straight line when it is stretched, a curved line when it is not. A plumb-line will give the idea of a vertical line. The walls of the class-room, a black-board, a copybook, etc., will fix in the minds the form of the rectangle; the set-square shows the triangle. The different polygons may be cut out in cardboard, and have their names written on them in large letters.

In the lower classes, definitions should not be formulated. Questions like the following must not be asked: "*What is a horizontal line? What is a rectangle? What is a circle?*" They might be asked in this way: "*What do you call this figure? and this line? and this one?*" Or, one pupil may be sent to the black-board, while the others are told to work on their slates or copybooks, and the teacher dictates: *Draw a straight line, . . . a curve, . . . a vertical line, . . . an angle, . . . a triangle, . . . a square, etc.*

Upper primary classes. In the primary classes, instruction is given in the same manner, but with some additions. For instance, instead of merely drawing a triangle, the name of its various parts should be given.

The different kinds of triangles are distinguished from one another; an equilateral triangle is drawn and its name written, together with the words, *three equal sides*; an isosceles triangle with the words *two equal sides*; a scalene triangle with the name only. As in the lower division the teacher should confine his instruction to *showing, analyzing, and tracing* figures; definitions and calculations being reserved for the lower and higher grammar classes.

Lower and higher grammar classes. After reviewing the principles already studied, which are completed by definitions, the teacher shows how to estimate surfaces and volumes. The method employed in superficial measure, to show that a square yard contains nine square feet, may also be employed to explain that the area of a rectangle is found by multiplying *the unit of area* by the numbers representing the length and breadth.

Examples. 1. A rectangle drawn on the board is supposed to be 7 feet long and 3 wide. It is divided into three parts, each 7 feet long and one foot wide; the first part is divided into 7 equal parts, each part representing a square foot: it is then easy to understand that the area of the rectangle is equal to 3 times 7 square feet, or 21 square feet; and that, to arrive at this result, we have to find the product of the unit of area, by the number of times it was repeated lengthwise, and the number of times this length was repeated breadthwise.¹ The rule for finding the volume of a cube may be established in a similar manner.

2. The square may be considered as a rectangle whose sides are all equal.

3. By joining the middle points of the adjacent sides of a rectangle we obtain a figure whose diagonals

¹ When beginning this class of problems, with the pupils of the lower grammar classes, the foot might be taken as unit, and a figure drawn on the board (or the floor) of which the sides really measure 3 and 7 feet. Afterward figures are taken whose dimensions are *supposed* to be the given values.

represent the length and breadth of the rectangle. The pupil may execute this tracing on a rectangular piece of paper; then, if the triangular-shaped corners of the rectangle be cut off and placed on the figure, he will find that they exactly cover it. The pupils will then see that the figure is equal to half the rectangle; whence the rule for the area is evident.

4. By the process of cutting, a parallelogram can be converted into a rectangle of the same area; hence the area of a parallelogram is obtained as in Example 1 above.

5. By cutting a rectangular piece of paper along a diagonal, we obtain two triangles which may be made to coincide. Each triangle has for base and height the base and height of the rectangle, but has only half the size: whence it may be deduced that the area of a triangle is found by multiplying the unit of area by half the product of the base and height of the triangle. This demonstration may also be made with the parallelogram.

6. The teacher may now pass to the regular polygons, which he divides into as many triangles having their apex at the centre, as the polygon has sides. The area of one triangle is found, and multiplied by the number of sides of the polygon. It evidently follows that the sum of the bases of the triangles, or the perimeter of the polygon, is to be multiplied by half the perpendicular of the triangles, to find the area.

7. The circle considered as a regular polygon with an indefinite number of sides, has also its apothem, the radius, and its perimeter, the circumference. Hence its area is found by multiplying the circumference by half the radius. But in teaching pupils how to find the circumference, the teacher may at first simply tell them that it is obtained by multiplying the diameter by the number 3.1416. It is a useful exercise to take a cylindrical object, and measure its circumference with a thread; then the diameter is measured with the same thread and is found to be contained a little more than three times in the circumference; the figures 3.1416 are

now written on the board, and exercises are given on the circumference and diameter.

8. By means of cardboard or stiff paper, the teacher can show how cylinders, cones, etc., are made. The relation between the curved surface of the cylinder and the surface of the rectangle, the surface of the cone and that of the triangle, etc., is thus evident; and the rules for the areas of the regular solids are easily deduced.

9. Squares are constructed on the sides of a right-angled triangle, the length of the sides being respectively 3, 4, and 5 feet; by checkering, it will be seen that the square on the hypotenuse is equal to 25 square feet, and that the sum of the squares on the sides is 16 sq. ft. + 9 sq. ft. or 25 sq. ft. The teacher states that in all right-angled triangles, the square on the hypotenuse is equal to the sum of the squares on the other two sides. Varied exercises will impress this principle.

All these processes are purely mechanical; they are illustrations and verifications rather than proofs. However, they are none the less useful, for they impress upon the memory of the pupil the rules deduced, and aid him in finding them out again, should he forget them. There are other important formulas, difficult to explain, which senior pupils should be able to apply. For instance, without going through the complicated demonstration of the formula for finding the area of a triangle in terms of its sides, pupils easily learn how to make use of it; it will be sufficient for the teacher to work two or three applications of the rule on the black-board. Similar remarks apply to such formulas as those for the surface and volume of the frustum of a cone, the area and volume of a sphere, etc. The knowledge of certain geometrical principles is required for mechanical drawing; in this case also the principles may be applied without demonstration.

Examples. 1. The teacher enunciates the proposition: *lines which are perpendicular to the same straight line are parallel*; he explains this on the black-board,

and by means of the rule and set square, makes several applications of it.

2. *If a series of parallel lines divide a secant into any number of equal parts, they divide also any other secant into equal parts.* After explaining the terms of this proposition, the teacher makes use of it to divide a line into a certain number of equal parts.

Another method of procedure consists in first constructing the figure and then deducing the principle from the diagram. Thus having erected a perpendicular at the middle point of a straight line, the teacher shows the pupils that by placing the leg of the compasses at any point of the perpendicular, an arc can be described which will always pass through the extremities of the straight line: this proves that any point of the perpendicular is equidistant from the extremities of the straight line.

These principles should be learned and repeated by the pupils, and enunciated when explaining problems in mechanical drawing. For instance, in the question: *Describe an arc passing through two fixed points, one of which is situated on a given straight line*, the teacher explains that the problem consists in finding the centre of the arc to be described. Now (1) this centre will be found in a perpendicular to the line joining the given points; (2) it must be situated at equal distances from the two given points. There are here two principles to be applied, and the pupils should state them at the proper time in working the problem.

In the higher classes the finding of areas and volumes might be followed by elementary problems on the circle, pyramid, cone, and sphere. The important formulas should be memorized without demonstration, and applied to numerous exercises. However, if the pupils were sufficiently intelligent, it would be advisable to prove and study the principal theorems relating to the properties of perpendiculars, parallels, tangents, proportional lines, equivalent and similar figures, and to give applications of them. This study should be limited

to fundamental theorems. It would have the twofold advantage of initiating the pupils into the art of reasoning, and helping them to understand better the principles of geometrical drawing.

CHAPTER X.

DRAWING.

I.—Faculties and Principles.

Faculties to be developed. Drawing demands that the *eye* examine with *attention* an object in order to find out its dimensions and relative proportions. The draughtsman employs his *judgment* and *reason* in comparing the different parts of a model, his *imagination* and *æsthetic faculties* in combining artistically known forms, and his *hand* in tracing out the conceptions of the creative faculty.

Principles to be followed. In teaching drawing:

1. The eye and the hand must be trained to observe exactly, and reproduce what was seen; hence practice should be given in subdividing lines, enlarging figures, etc. The figures ought to be taken from nature.
2. The intelligence and imagination of pupils should be exercised by questioning them on the principal lines, their directions, and proportions; and getting them to suggest new combinations. Such questions will oblige them to attend, to reflect, and to observe.
3. The æsthetic sense or power to perceive the beautiful should be trained. The school-room walls ought to be adorned with good drawings, engravings, and photographs; and neat, well-proportioned black-board models ought to be exhibited at each lesson.
4. The pupils should be given an elementary knowledge of the laws and forms of the beautiful. This

knowledge will help them to appreciate works of art.

II.—General Observations.

Aim of drawing in the primary classes. The aim of this instruction in primary classes is to train the æsthetic sense of the child, to develop his faculty of observation, and above all to furnish him with the means of expressing his ideas with ease, by sketches representing the various objects connected with the dwelling-house, furniture, utensils, and local industries. Drawing ought not to be considered merely an accomplishment, or a means of favoring an artistic vocation, but an every-day and practical art, and an indispensable mode of expression in modern industry, a writing down of material forms.

In teaching this branch, the teacher should endeavor to make the pupil acquire manual dexterity and great precision in visual observation. This second result is much more important than the first; for, correct observation—the talent of seeing exactly—is an indispensable qualification for a good draughtsman.

Characteristics of a good method of drawing. A good method should:

1. Afford interesting and well-graduated exercises.
2. Be suited to the capacity of the majority of the pupils of the class.
3. Render very difficult, if not impossible, the servile copying of shaded engravings, and lithographs; and by the choice of models, give much exercise in educating the sense of sight, as well as the power of reflection and the personal initiative of the child.
4. Without neglecting the theory relative to geometrical drawing and the rules of perspective, not spend too much time at them, but pass on rapidly to the practical parts, particularly if the pupils are to leave school at the age of thirteen or fourteen years.
5. Lead the pupils to draw in perspective and par-

ticularly in projection, natural objects and elementary ornaments.

The defects to be avoided in teaching drawing are:

1. Transforming simultaneous into individual teaching, each pupil having a different model and reproducing it according to his own fancy without effective explanations or corrections from the teacher who, under such circumstances, can give only a very short time to each child.

2. Reproducing the models without changing the size, or by mechanical processes such as tracing paper, squared paper, or dividers. These processes have the serious disadvantage of not exercising sufficiently the pupil's faculty of observation, and of withdrawing his attention from the model as a whole, and from its general proportions.

3. Getting the pupil to copy from engravings, or large drawings with complicated details.

III.—Models for Drawing.

The usual models are: (1) drawings on the black-board; (2) large wall charts; (3) copybooks of designs; (4) natural objects. These different kinds of models may be used alternately during the drawing lessons, in order to make them more interesting.

Drawings on the black-board. The pattern on the board is the best of all intuitive methods of teaching drawing. In the lower classes the teacher draws on the board almost all the patterns which the pupils are to reproduce. In the higher classes, the black-board is used for geometrical figures, theoretical explanations and sketches of certain details to which particular attention should be called, in order to give precise knowledge of special forms or to correct an error made by several pupils. The preparatory outline for a drawing from a wall chart or an object from nature, is also done on the black-board.

The wall charts. These are drawings prepared beforehand on large sheets of paper. The drawings made on the board have the advantage of allowing the pupils to see how the teacher begins, continues, and finishes his work; but these models are effaced after a short time, while those on the charts can be preserved indefinitely, and used several times.

In imitation drawing, the models on the chart remain before the pupils during the whole work; but in geometrical drawing, the teacher takes away the model when the pupils have made a measured projection of it in the horizontal plane. It is by means of this projection that they afterward work out their pattern according to a fixed scale. The mural chart, as well as the black-board models, should have the following qualities:

1. It should be easily seen at a distance. The paper chosen should be white or very faintly tinted. The pattern must be drawn very large, with brush, crayons, or charcoal pencil, in a bold, vigorous outline. Its legibility will be increased if either the surface of the object drawn or its background has a water-color tint; but colors which are too bright or too sombre should be avoided.

2. It should be graceful. A model cannot be too correct; children preserve the remembrance of first impressions. Hence models of good style ought to be selected; those wanting in elegance, naturalness, simplicity, or harmony of proportion should be rejected.

3. The proportions should be simple. The models in elementary drawing should have simple proportions between their different parts. Thus the length might be to the breadth in the proportions of 1 to 2, 2 to 3, 3 to 4, etc.; and such and such a detail may be a third, a fourth, a fifth, etc., of the total height of the model. Besides being less difficult for the pupils, these proportions facilitate the work of the teacher, and give him the opportunity of easily ascertaining whether the pupils have accurately done their work.

4. It should present exclusively a geometrical view

of the object, that is, it must not represent objects in perspective. When a perspective drawing is to be made, some object in nature should always be taken as a model, and represented as it appears to the spectator in whatever position he happens to be placed: this is the only way to learn perspective. A chart model shows only one view of an object out of the many it would offer according to the position of the spectator. Hence it is not advisable to reproduce these models frequently.

Copybook models. Copybook models are collections of drawings, or measured horizontal projections, which the pupils are to reproduce on a different scale, changing them a little, or making them more complete.

Objects from nature. These are the best of all models. For imitation drawing they comprise: surfaces and solids in cardboard; casts of simple ornamentations; geometrical figures carved in wood, standing out in white relief from a panel painted dark gray; familiar objects; natural or artificial leaves of various plants, etc. For geometrical drawing, the objects should be simple in form: a solid figure, a brick, a box, a little seat, a watering pot, an implement, a utensil, a plain piece of furniture, such as a desk or table, etc.

IV.—Methods of Teaching.

The principal methods of instruction in drawing, which may be used either alternately or combined, are:

1. **The model explained and drawn on the black-board.** Each part of the model is drawn on black-board and then explained by the teacher, while the pupils reproduce it immediately, line by line, as it is drawn. The teacher passes in and out among the pupils, observing if the explanations have been understood and put into practice. This method, which is good for beginners, leaves them little initiative; but it has the advantage of giving all the pupils a good method of

setting about their work, and of bringing teacher and pupils into communication. . In a large class, a skilful pupil may be placed between two less proficient; but his work should never go further than verbal instruction. It will then be sufficient for the teacher to correct the work of such *monitors*. In this way a uniformity in the general working of the class will be more easily attained.¹

2. **The model explained briefly at the beginning of the lesson.** The teacher gives an oral explanation of the model exhibited before the class. He draws a rough sketch on the board, and if necessary the pupils take notes of the explanation; they then begin a copy of the drawing, according to scale and other given conditions. This method allows the pupils much initiative, but it is only suitable for those already skilful. It also allows a teacher who has not much time at his disposal, to give the lesson to several groups of pupils successively; one set works while the other receives explanations. This method may also be employed for tests or periodical competitions.

3. **The model in the pupil's book explained before being copied.** A certain model is selected from the book; this must be copied, according to certain conditions of size and proportion determined beforehand by the teacher. According as these conditions are more or less detailed, the execution gives scope for a certain amount of initiative, on the part of each pupil. The work is also facilitated by the drawing, explanations, and questions of the teacher. This process may be employed in all grades of instruction.

V.—Drawing in the Different Grades.

General programme. The representation of an object just as it is seen with the deformations and illusions of perspective, is *imitation* or *pictorial* drawing. The

Allow pupils to reproduce their work on the black-board occasionally.

representation of the same object in its exact form and dimensions, whether reduced or not, by a conventional sketch which furnishes all the measurements and directions that a workman would need for its reconstruction, is *geometrical* drawing.

In imitation drawing, tracing instruments are reduced to a minimum; the pencil is almost the only implement; the eye and the hand play the most important part. In geometrical drawing, on the contrary, the ruler and compasses are continually used. Another kind of drawing which combines something of the other two is the *measured horizontal projection* or *decorative*: it is free-hand drawing with pencil or pen, which employs the conventional tracings of geometrical drawing. In the higher grades a neat copy of this projection might be often made by means of ruler and compasses. After beginning by elementary freehand exercises in copying flat models, the pupil gradually advances to drawing models in relief. He sketches measured horizontal projections, and when his hand is sufficiently skilled to use compasses, he practises geometrical drawing, which he continues up to the study of the theory and practice of projections.

Lower primary grades. Here the pupils study successively the point and its positions; the straight line, its directions, the method of dividing it into equal parts, the proportions between different lines; parallel, perpendicular, and oblique lines; angles, their different sizes and positions; the square, the rectangle, the triangle, and a general idea of curves. Symmetrical combinations of these different elements, and outlines of common objects of simple shape complete the course.

In the beginning, the attention of the pupils should be drawn more to the examination and observation of forms and colors than to precision in the tracings. Before all, they must learn to observe, to compare, to see the points of similarity and dissimilarity, and the relative positions of objects set before them. The chief features

and surfaces should be shown concretely, before being reproduced on the paper. For this purpose small sticks, slips of paper or cardboard surfaces, etc., are used. The models should be exposed to the view of the children while they are drawing them.

Upper primary grades. The pupils begin what is commonly called drawing of ornament, because the subjects studied belong for the most part to the decorative art in its most elementary form. The exercises are grouped mainly around the four elements, the straight line, the circular or elliptical line, the sinuous line and the spiral. Each of these, either alone or in combination, will afford varied and interesting models, which may be interwoven into drawings of flowers, leaves, shields, and plain but graceful vases. All these models are drawn on a flat surface. The teacher should also give some rudimentary ideas on the manner of harmoniously grouping simple decorative designs; and exercises in symmetry, duplication, and alternation. From time to time the designs might be lightly colored.

Lower grammar grades. The programme comprises:

1. A more extended course on curves and spirals than that for the primary grades.
2. Decorative tracings, and simple exercises in combining and grouping according to a proposed plan.
3. Simultaneously with these studies, the copying of ornaments in bas-relief. These ornaments might be either in cardboard, wood, or plaster.
4. The tracing of solids of large dimensions and high relief.

The knowledge of perspective required by pupils may be acquired by observation alone, and without any scientific theory. The teacher directs this work of investigation by starting from observed phenomena, and leading the pupils to deduce from these observations the principles of lineal drawing, and the proper placing of the shadows. These principles, worded with precision, should be afterward constantly applied.

In this division easy exercises in geometrical drawing, might also be given; such as the plan of straight lines, parallels, perpendiculars, triangles, and polygons. From these the pupil learns to manipulate ruler, set square, and compasses. Cheap pencil compasses suffice for this kind of work. It is advisable to have each problem followed by practical applications, such as very simple designs for floor tiling, mosaic work, or inlaying.

Higher grammar grades. The pupils of these grades should practise both imitation and geometrical drawing.

Imitation drawing. The programme of the middle division is completed by elementary exercises in decorative grouping according to a given *motive*, and by the drawing of ornaments and objects in full relief: roses, leaves, mouldings, and ordinary objects; some sketches of leaves of plants drawn from nature may be added. It should be remembered that the proper placing of the whole and of each principal detail is the essential thing in object drawing; the shading though done with care and skill will add little to the value, if the outline be defective.

Conventionalization means the process of modifying some natural object, *e.g.*, a flower, leaf, or a whole plant so as to preserve only its general character, omitting unimportant details. Objects should be conventionalized occasionally.

The operations to be performed when drawing objects from nature are:

(a) *Placing in proper position the chief features of the outline.* (1) The drawing of a rectangle of proper size to support the model; (2) sketching the principal lines of the pattern after having examined attentively their position and respective distances; (3) gradually filling in details, continually correcting and improving the lines already drawn.

(b) *The arranging of the shading.* (1) The limits of the shades and shadows are marked, and the whole

mass of shades and shadows pencilled over of a uniform tone; (2) the light shades and shadows are put in without exaggerating them; (3) the dark shadows, placed at the characteristic points of the models, are emphasized, without being made too black.

From time to time, the pupils may be asked to execute from memory some models which they have already copied, or household objects of simple form.

Geometrical drawing. Each pupil of the grammar grade should have a set of geometrical drawing instruments. The programme comprises problems on finding the ground-plan of intersecting lines, followed by exercises; ground-plan of mouldings; and horizontal and vertical projections drawn to scale. The pupils on leaving this grade should know the elements of projections. The groundwork of this instruction must be the direct observation of objects, but the teacher should not delay too long on abstract explanations and unusual figures. After a short study of the principal cases of projections of lines, surfaces, and complete or truncated solids, the teacher takes up the projection of simple objects: benches, easels, trestles, small articles of furniture, different kinds of carpentry work, parts of machinery, and plans for dwellings.

Sketching from nature is preferable to the best drawings done from a flat pattern. The following method is suitable for this kind of drawing:

The teacher exhibits the object to be drawn; it should be large enough to have its details perceived by all the class. He draws it on the black-board, or has it drawn by one of the pupils, and gives all the explanations necessary for its tracing. At the same time, the pupils draw in their books a freehand pencil sketch of the pattern done on the board. When the sketch is finished the teacher measures or has measured the dimensions of the object, and writes them on the black-board; as he states them the pupils write them on their sketch. The drawing on the board is then erased, and each pupil

draws the object neatly and according to scale, making use of his own sketch.

School exhibit. In some schools it is customary to exhibit along the walls a certain number of the best drawings done during the year. The exhibition ought to be composed of a selection of drawings from the whole school, a certain wall-space being allotted to each class. It will show the methodical and progressive advance of the instruction from the simplest efforts of the little ones to the exact drawings of the advanced. In such exhibits quality should always be preferred to quantity; and work liable to provoke criticism ought not to be shown, particularly if it goes beyond the school requirements. Drawing is the principal element of the annual exhibit; but it would be well to have also geographical sketches, specimens of writing, exercise copybooks, manual work, etc.

VI.—Kindergarten.

The Kindergarten gifts may be used with advantage as a means of giving recreative and useful employment to young pupils. The gifts are generally specified by numbers.

Gift I. consists of six rubber balls covered with thread representing the rainbow colors: red, yellow, blue, green, violet, and orange. It is intended to teach color, form of the simplest kind, politeness, direction to the right, to the left, up and down. A conversational lesson on some familiar object might be given in connection with this gift. Each lesson ought to finish by a game, such as throwing and catching the balls, etc.; the various games might be accompanied by songs.

Gift II. consists of a sphere, a cylinder, a cone, and a cube. These objects are in wood; and by comparing and contrasting them the pupils get an idea of forms, and of the meaning of the expressions, square, line,

angle. A conversation lesson on *wood*, and drawing lessons might be given at this stage. The drawing lessons should consist of the simplest tracings, lines, squares, circles, etc.; and dotted paper should be used. Games, music, and little rhymes might be taught in connection with these exercises.

Gift III. consists of a cube divided into eight one-inch cubes. Children are fond of analyzing things, and this tendency can be satisfied by the third gift. It teaches the meaning of *whole* and *part*, gives ideas of size, of number, and of direction: above, below, before, etc. With this gift the pupils can build *forms of life*: crosses, arches, chairs, benches. The first ideas of number may be given by *counting*, *adding*, and *subtracting* the little cubes; and also a knowledge of *equal* parts, *half*, etc. Object lessons on *matches*, *lead pencils*, etc., may be given; and drawing on dotted paper should be continued.

Gift IV. consists of a cube equal in size to the cube of the third gift, but divided into *bricks*, the length of each being twice its width and four times its thickness. By placing two of these bricks face to face, it will be seen that they are exactly equal in size to two small cubes of the third gift; hence the brick is equal in *volume* to the cube. The pupils can be given ideas of equal parts, of divisions one-half, one-fourth, one-eighth, and of words length, breadth, height with the third and fourth gifts; and more complicated forms of *life*, *knowledge*, and *beauty* can be shown.

Gift V. is a development of the third. It consists of a large cube divided into twenty-seven one-inch cubes, three of which are divided diagonally into half, and three into quarter cubes. It teaches the forms of acute and right angles, of triangles, perpendiculars, and slanting lines. Windows, doors, chairs, etc., may be formed with this gift, and their *elevations* may be drawn on dotted paper, under the direction of the teacher.

Gift VI. is a development of the fourth. In this gift the large cube is divided into twenty-seven *bricks*: eighteen of them are whole, six are divided into square blocks by being cut in the direction of the breadth, and three are divided into columns by a lengthwise section. More intricate forms of life can be built than is possible with the fourth gift, and the objects built should be drawn on paper by the pupils.

In the preceding six gifts the objects are *solid* bodies—three dimensions. The seventh gift consists of quadrangular and triangular tablets of stiff, colored paper, presenting only two dimensions, and serves as a transition from concrete to abstract teaching. The pupils learn to compare the surfaces and angles of the quadrangular and triangular tablets, with the faces of the cubes and half cubes; afterward they build up symmetrical, colored designs, and reproduce them on dotted paper. When these gifts and the lessons suggested in connection with them have been taught, the teacher might give exercises in stick-laying, paper-folding, weaving and braiding, etc. A conversational object lesson on *paper* might be given in connection with this gift.

A useful “game” may be contrived with gifts III. to VI. The teacher builds houses representing stores, and pointing to one of these imaginary stores says: “This is a candy store. John, come and ask for a cent’s worth of candy.” The children should be taught how to ask for and receive things. At the next lesson some pupils might act as store-keepers, others as purchasers; and both parties should be taught how to act and speak.

It must not be forgotten that the gifts form the least part of what is called Kindergarten teaching; indeed, they are only the “recreative employments.” All lessons in lower primary classes ought to be taught according to Kindergarten principles, and associated with one another; after explaining the first gift the teacher might choose a green ball, and print on the black-board sentences like, *the ball is round, it is green and light, it will*

roll on the floor, and have these sentences as the matter of the reading lesson, and one of them as a head-line for the writing lesson; the balls will serve for counting at the lesson on numbers.

VII.—Manual Work.

Manual work, auxiliary and complementary to drawing. Manual instruction and drawing mutually help each other, and it is advantageous to carry them on simultaneously. Sometimes a pupil *draws* a model which he himself has made of sticks, strips of paper, cardboard, etc.; and sometimes he makes a cardboard model of a drawing specially prepared with a view to manual work, that is, having clearly defined measurements and proportions.

Manual instruction has the same object as drawing; it aids very much in the education of the senses, particularly the sight and the touch; it encourages natural aptitudes of precision and good taste. It shows that drawing is not merely a combination of lines, colors, and shadows, but the representation of material objects that can be constructed. It may also be used in making clear and concrete the first abstractions in arithmetic and geometry. Exercises in folding or in carving are often the proof or the application of geometric principles relating to the square, the rectangle, or the triangle. In addition, manual instruction provides a useful and agreeable relaxation which might be reserved for that time of the day when the pupils are tired of study.

Advice relating to manual instruction. In order to be practical, the exercises in manual instruction ought not to require costly material or cumbersome tools, or to occupy too much time. Toward the end of the school year, a little more time may be given to it than during the first months. The best made objects might be exhibited in the class-room, replacing them from time to time by new work.

In the primary and grammar grades, manual instruction is a useful relaxation and means of occupation for the activity of the pupil. It consists in the arrangement of sticks, strips of paper, or of geometrical figures in colored paper. In the middle and higher grades the work becomes proportionately more difficult. The foldings, cuttings, and weavings, executed in a more exact manner than in the lower grades, are followed by the construction of solids in cardboard, modelling, wire-work, etc.

CHAPTER XI.

AGRICULTURE.

Aim and character of agricultural teaching. The principal aim of agricultural instruction is to awaken in the child the faculties of observation, research, and experimentation; to prepare him to understand and reason out the various processes of cultivation, and, consequently, to draw from the land better and more abundant crops. It is a means of making agriculture loved even by pupils who may not be destined to live in the country habitually, and of combating routine and prejudice, which so often prevent the agricultural population from benefiting by discoveries and improvements. Another aim of agricultural instruction should be to make field labor appreciated, and thus diminish the emigration into large cities.

Agricultural instruction is usually given by means of object lessons; it should be both theoretical and practical. The theoretical part is for the higher classes only, and consists of elementary notions of botany and agricultural chemistry; the practical portion consists of tillage experiments made principally in the school garden.

It would certainly be going too far to try to explain to the children of a primary class all the resources opened

up by natural science for agricultural operations; nevertheless the pupils should know something about nitrogen, phosphoric acid, potassium, and lime, before studying the subject of manures; and the fertilizing action of these substances ought to be shown by comparison of results obtained in garden-plots, boxes, or flower-pots. After having proved, by experiments, that a plant is a living organism which has need of nourishment to develop, some very simple concrete lessons might be given on the growth, alimentation, and propagation of plants.

The agricultural museum. To give interest to his lessons and make them practical, the teacher might show the pupils well-chosen specimens, soils, seeds, plants, etc., illustrating the part of the subject which he teaches. A course in agriculture, even of the most elementary kind, supposes the organization of an agricultural museum. The teacher ought to collect different kinds of soils, and preserve them in labelled glass vessels. He may obtain from local merchants samples of seeds and artificial manures; and from the neighboring farmers plants peculiar to the locality. He will find it useful to have wall charts representing agricultural implements, plants, and animals.

The lesson in agriculture. The lesson in agriculture can be given with or without a book. In the first case, the oral explanation should be followed by a written summary of the principal points for study. There are two ways of making use of a text-book: (1) After the oral lesson, it is read aloud, and the teacher explains the text referring to the subject just treated of; (2) the pupils read in their text-book the subject of the lesson; the difficult terms are explained as they occur, and some short observations may be added.

Whichever process is adopted in giving the lesson, the teacher should bring to class samples kept in the agricultural museum, or specimens cultivated in the school garden. He should perform elementary experiments, suitable to the subject, comparing the method

shown in class with those followed by farmers in the locality; but he must bear in mind that certain principles and processes are not equally applicable in all parts of the country. The better to impress his teaching, he might conduct the pupils to gardens or farms in the neighborhood, as often as circumstances permit; he can there recall the lessons given in class, and, by practical remarks, develop in the children the habit of observation.¹ The dictations, compositions, and arithmetic lessons might often have for subject, in rural schools, agricultural elements, as the yield of a poultry yard, a hive or a crop, the cost of seeds and sowing, the harvest produce, etc.; and all these exercises should be in connection with the monthly programme in agriculture.

Primary classes. The work of this grade is principally a preparation for the more important instruction to be given to the grammar grades. With very young children, it is necessary to appeal to the eye, and to make the explanations concrete, by showing the objects. Hence plants of the locality ought to be procured: wheat, rye, oats, barley, flax, poppy, wild mustard, etc. By this means the pupils acquire much useful information.

After having shown and named the plant, the different parts are pointed out: root, stem, buds, leaves, flowers. Some explanations, easily understood by young children, are given on the functions of each organ. Details which would be suitable for the lower grammar grades, such, for instance, as the nutrition of plants, the elements absorbed by them, and whence they are derived, etc., should not be given to primary classes. Instead of these the teacher might *show* how a seed germinates and how the young plant develops; these little experiments, besides being necessary, excite the curiosity of the pupils and leave a lasting impression on their minds.

¹ Children might bring seeds, or teacher supply various kinds of seeds to the pupils—have them sow the seeds in boxes prepared—watch and study growth in the different stages.

For instance, a transparent glass vessel is filled with moistened moss or sawdust; a fairly large seed, such as a pea or a bean is placed on the sawdust near the side of the vessel. By keeping the vessel at a suitable temperature, the little plumule and radicle soon appear. While the first grows upward, the second descends and branches out all round the inside of the vessel. The children will realize the phenomenon of germination, and will follow with interest the different phases of growth.

The pupils might also be present at the sowing of different kinds of seed in a border of the school garden; they might sometimes count the number of seeds sown, and later those that come up; the natural deduction will be, that some have germinated, and others have not. This fact being established, the cause should be ascertained: either the seeds were not all sound, or they were buried too deep. Three questions naturally arise: when are seeds sound? when bad? why do they not come up when buried too deep? These examples suffice to show how young children may be prepared for the lessons in agriculture that they will receive later.

Lower and higher grammar grades. Without practical demonstrations, lessons in agriculture would be of little use. At the same time, while it is advantageous to have experiment plots close to the school, the true field of operations is the surrounding country. The pupil has seen tillage operations; but he does not know why furrows are more or less deep. He knows vaguely that, without manure, crops would not be abundant; but has no idea that there are in the same neighborhood cultivable soils differing in composition; that, according to their composition, they are more or less fertile, and that there are means of improving them. Although he may be able to distinguish between natural and artificial meadows, he probably does not know how the latter are produced, and the constant care they require. He sees that, on the same piece of ground, crops are rotated, but he does not know the reason of it. All such points should be explained to him.

The teacher ought to endeavor to be useful to the people among whom he lives. For instance, if he wishes to give information about cultivable land, he should find out precisely the nature of the soil, as well as its qualities and defects, in order to be able to indicate with certainty the best methods for improving it. The requirements of certain districts may oblige him to specialize his teaching. In one district he may have to explain the mode of cultivation for the different sorts of cereals or of leguminous crops, and the conditions necessary for their successful growth; in another, the plants used in industries, the manure suitable for each, their cultivation and uses. Elsewhere, more attention will be devoted to arboriculture: the selection, planting, pruning, and grafting of trees, the artificial means of propagating them, and the treatment they require when diseased. The course should also comprise lessons on useful insects and weeds, and on injurious insects and weeds, specially chosen from among those found in the neighborhood.

CHAPTER XII.

SINGING.

I.—Faculties and Principles.

Faculties to be developed. The object of vocal music is voice culture. It improves the *hearing*, and acts on the *sensibility* by developing and perfecting the power of appreciating the *good* and the *beautiful*; it acts also on *religious* and *patriotic* feeling. As an art, music is subject to the laws of æsthetics.

Principles to be followed. Lessons in music should: (1) Suitably exercise the vocal organs; (2) be simple and harmonious; (3) appeal to the sensibility, elevate the soul, and cultivate good taste; (4) be accompanied by playing on an instrument, preferably the violin.

II.—General Remarks on the Teaching of Singing.

Its educational use. Singing has an educational influence that teachers ought to utilize. When well conducted, it trains the *sensibility* and opens the *heart* to the most diversified impressions: sentiments of joy and of gentle melancholy, of recollection and piety, are aroused by hymns and canticles of the church; enthusiasm is excited by patriotic songs; a healthy gayety by lively tunes. Singing must be made to help in the moral and intellectual education of the pupils. It is of the greatest importance to train the child's æsthetic sense, to make him appreciate and seek what is truly beautiful; to put him on his guard against vulgar and low-class productions to which he may sometimes listen and to give him a distaste for anything approaching immoral songs. Those songs should be avoided which cannot be presented in decent society without suppressions and arrangements; singing them in public is a manner of advertising them, and of indirectly soliciting the pupils to procure them for themselves.

Liturgical chant. The liturgical chant is a method of prayer; hence the stamp of simplicity and adoration it bears. It is melody in its most natural and most expressive form. It adds the unison of voices to the union of hearts, and one of its qualities is its fidelity in translating the varied sentiments of the divine Office.

Plain chant should be taught in Catholic schools, as the pupils, particularly those of the senior classes, are frequently expected to take part in the singing in church. The good rendering of plain chant supposes the correct reading of the Latin words, and a general understanding of the text. At all singing lessons, the teacher should insist that the pupils sing softly; he must not allow them to shout, or even to give the full volume and intensity of their voices.

The pupils should be taught only a small number of

liturgical pieces; they must not be allowed to pass from one to another, until a satisfactory rendering is obtained, so that it may be possible to give an almost faultless public performance of them. When this point of perfection has been reached, care should be taken that routine and other defects caused by negligence are not allowed to creep in.

Hymns. The singing of hymns is very useful in the work of education. It prepares the souls of the children to receive divine grace; and disposes them for prayer. But these effects will be produced only when the singing is well executed. It must be done softly, and the movement must be neither hurried nor drawling. Singing in this way is an excellent means of training the voice, and the only way of obtaining precision and unison. Singing hymns is an aid to recollection, and becomes a prayer if attention is paid to the meaning of the words.

Remarks. 1. An important condition for the giving of suitable expression is to be deeply penetrated with the general character of the hymns. They are, according to the subject, pleasant or grave, simple or majestic, calm or emotional. A hymn on *death*, for instance, requires different expression from one on the *happiness of heaven*, which may be in the same key, measure, and movement.

2. As hymns are chanted prayers and instructions, a sentiment of piety should give them a special stamp, thus essentially distinguishing them from profane songs. Before putting the words to a tune, it is useful to read or to have them read aloud, insisting on good articulation. A rapid analysis of them may be made, to facilitate their due understanding and to show the beauty of the ideas and sentiments.

3. A hymn produces its full effect only when it is known nearly by heart, which means that it must be frequently repeated.

4. The teacher should not have a hymn sung in church

unless the preparation has been sufficient to insure its being properly executed.

Secular music. It would be advisable that each school have a *repertoire* of secular songs to be utilized on the occasion of school festivals, such as the visit of a bishop or other ecclesiastic or benefactor, at the distribution of prizes, etc.; or to be sung at family gatherings.

Too much care cannot be given to the choice of pieces for one, two, or three voices, with regard to the ideas conveyed, the words which express them, and the music by which they are interpreted. The minds of children must be raised and their taste formed; it is then from the works of good composers that the pieces to be studied should be selected. The ideas should be moral, clearly and correctly expressed, and ought to convey a lesson easy to perceive. As has been said of the singing of hymns, it is advisable to have the text read aloud and analyzed before having it sung.

The degree of difficulty of the piece chosen should be considered by the teacher, according to the materials he has at his disposal. A very simple chorus, well understood and well executed, will be more pleasing to the performers and to the audience than one more difficult, but badly rendered. For public singing, it is not enough to have the rendering *almost* correct; but it is necessary to attend to the musical indications and expression which complete the rendering by adding a certain artistic charm.

III.—The Singing Lesson.

Good rendition in singing. Whatever be the subject of the singing lesson, the teacher should always have the piece well executed. The following recommendations on this subject are important:

1. Pupils should not lean forward when singing but hold their heads up and keep the chests expanded.

2. Screams and forcing of the voice must be avoided, as they render singing disagreeable and incorrect. Children are naturally inclined to sing with a chest voice; they must be taught to use the head voice. One means of obliging them to do this is sometimes to raise the key a half tone or a tone.

3. Much importance ought to be attached to clearness of articulation and purity of pronunciation. In certain localities articulation is very clear, but the pronunciation is defective; in others the articulation is less good, but the pronunciation is better. An effort should be made to correct these defects, by pointing them out and giving useful exercises.

4. The softer the singing, the more distinct should be the articulation.

5. The means of obtaining satisfactory harmony and uniformity is to observe the time as accurately as possible; for this purpose each note and rest must receive their exact value. The pupils should begin and end together and listen to each other singing, each satisfying himself that he does not go more quickly or more slowly than the others.

6. Care must be taken that the different parts in a choir be properly balanced, and that the melody be not obscured and absorbed by the accompaniment.¹

7. It is important that the attack be bold; to secure this it is an advantage to have at the head of each division of the choir some practised singers to give the lead to the others.

8. The pupils should attend exactly to the musical indications. In the *forte* passages, they must not go beyond the natural power of their voices, or try to dominate the other singers.

9. What gives expression to singing is the sense of the words, and the indications marked by the composer for the interpretation of the melody. The teacher

¹ For balance of parts, a choir of twenty-five voices may be divided in the following way: Sopranos 12, altos 4, tenors 4, basses 5; and in a like proportion for any number of voices. Thus, a choir of fifty voices may be divided: Sopranos 25, altos 7, tenors 8, basses 10.

should enter into the spirit of the piece, attend to these indications, and get the pupils to attend to them.

Preparatory and primary classes. As speaking is learned before reading, so singing may be learned before knowing the principles of music. On their entrance into the school, young pupils should be exercised in singing by the auditory method, until their age permits of their studying solfeggio. This early education trains the ear and helps the pupils to sing softly. The teacher ought to make a selection of short, easy, musical airs: little poems elegant in style, moral in tone, and relating to children's games, scenes from nature, the Christian virtues, and patriotic reminiscences. The tunes should be melodious, of good rhythm, and easily within the range of the voices.

The following method is suitable for teaching songs to very young children:

1. The teacher writes on the board a fragment of the text, has it read, and explains its meaning.
2. He sings two or three times consecutively, the first bars of the piece forming a musical phrase.
3. He has these few bars repeated by a group of the best singers first, then by the whole class, and sufficiently slowly to accustom the ear to certain portions of greater difficulty.
4. The teacher sings a second phrase, has it repeated in the same way, then connects it with the first, and so on.

During the execution of these songs simple explanations of musical signs may be given, to initiate the young pupils into the theory of solfeggio; but these explanations should be few at each lesson. Attention must also be paid to the defects of the different voices, in order to correct them; and to avoid fatiguing the children, the songs and tunes ought to be short.

Lower and higher grammar grades. Although the study of music may begin earlier, it is only from the age of nine or ten that children's voices can be cultivated.

These voices may be divided into three categories: the soprano or first treble, mezzo-soprano or second treble, and the contralto. The first and second trebles should not use the chest voice except from low *do* to medium *sol*; the first should use the head voice from *sol* to *la* above the staff, and the second from *sol* to *mi*. The real contralto voice extends from low *sol* to *si* and even to *do*. The voices ought to be grouped at the beginning of the school year; it would be well to examine them once or twice a year, and make the necessary changes in the groups.

The time devoted to the teaching of singing scarcely permits any attention to musical difficulties. What is of most importance for school-children is that they acquire the elementary knowledge necessary to enable them to read a simple song, or to take part in a choir, or to learn to play an instrument. This knowledge will be sufficient for most of the pupils, and will serve as a foundation for the more extended studies which some among them may pursue.

Hints for the singing lesson. The lesson should be divided between solfeggio exercises and the study of songs with words.¹

For the solfeggio exercises the teacher has: (1) The notes named; (2) two or three of the most skilful pupils to read the piece in time to insure rhythm, and then the whole class to do the same; (3) the most difficult intervals of the piece sung from a scale written on the black-board;² (4) the piece sung by groups at first, and then by all together. The group chosen to sing first should be composed of the children with the most exact

¹ Figured and lettered music: In the primary schools of a few countries figured or lettered notations are employed. The advantage claimed by such systems is that the children learn to sing very soon, the musical signs being very simple, and all the scales being referred to one, by means of an indication placed at the beginning of the piece, marking to which note the *do* of the tuning fork corresponds. But a knowledge of the staff notation is indispensable for pupils who wish to learn to play an instrument. Lettered music suffices for children in the junior classes.

² Or from a *modulator*, if the tonic-solfa is taught.

and pleasing voices. For airs accompanied by words, the teacher first explains the words, and then sings them himself to show the proper expression, before making the pupils sing. It is better to have few songs, but to have them perfectly known; otherwise the pupils will preserve only a few unconnected pieces of what they have learned.

In order to insure progress, the teacher should attend to the following points:

1. To explain but few difficulties at a time, and to review some of those already studied.
2. To dwell on the difficulties in each category: reading the notes, intonation, rhythm, etc. Many pupils lose their time, and get a dislike for the solfeggio class, through not having the first difficulties explained.
3. To give numerous exercises bearing upon any one special difficulty; for this purpose hymns and songs illustrating the difficulty may be taught.
4. To teach children to breathe regularly and deeply; this is necessary for physical health and comfort, as well as for the good rendition of melodies.
5. To have the exercises gone through by small groups, and even by individuals, as otherwise the pupils never acquire the necessary confidence.
6. During the first lessons in the lower grammar grades, to give a great deal of time to the auditory method, by getting hymns and songs learned in the manner pointed out for the primary classes.
7. To vary the exercises, by alternating, in the higher classes, reading of notes *recto tono*, singing in different keys, *laa-ing* and *koo-ing*, exercises in rhythm, etc., always graduating the difficulties in each kind of exercise. These exercises may be written on the black-board.
8. As in other subjects, to make use of every means to excite and maintain emulation.

Musical dictation. When pupils are sufficiently advanced they may be exercised in musical dictation. It may be carried on in two ways, orally and by writing.

For oral dictation, the teacher sings to *la* a very short phrase of a song or hymn tune known to the pupils; and having given the *do*, he has them name successively from memory, the notes of the phrase. Having obtained this result, the teacher again sings to *la* the same phrase, and beats time, and the pupils name and tell the value of the notes sung.

For written dictation, when the pupils have acquired the habit of copying music, the teacher dictates a series of notes and tells them their value, semibreves, minims, crotchets, etc. When these notes are written, he directs the pupils to place correctly the bars according to the time indicated: common time, three-fourths, two-fourths, etc. Later on, he may require them to reproduce from memory and in correct notation, short, well-known melodies. The teacher first vocalizes the piece in its entirety, and the pupils must recognize the key, mode, and time; the dictation is then given, bar after bar being vocalized, each phrase terminating by the first note of the following bar. These various exercises should first be explained on the black-board.

CHAPTER XIII.

PHYSICAL DRILL.

I.—Faculties and Principles.

Faculties to be developed. Drill directly exercises the *physical activities*, and indirectly the *moral* and *intellectual* ones. The *intellect* should as far as possible understand the reason and utility of each movement, and the *will* must obey the commands promptly. The child is thus accustomed to overcome difficulties.

Principles to be followed. The series of physical exercises should be: 1. Practical. They should strengthen the muscles, promote health, and contribute to the

social education of pupils. They are not intended to train athletes or acrobats.

2. Rational and not empirical. The teacher must have sufficient knowledge of physiology to know the effect of given movements on certain organs, the best time and place in which exercises should be given, etc.

3. Suitable. The teacher should prescribe special exercises for certain pupils; for example to develop weak chests, he might multiply respiratory movements, etc. The organs must be exercised successively, alternately, and progressively.

4. Performed as perfectly as possible, and accompanied by music.

II.—General Considerations on Gymnastics.

Function and utility. Muscular activity is the main-spring of the physical development of the child; it urges him to frequent movement; stimulates the regular circulation of the blood; strengthens the muscles, and gives vigor to the whole frame. To repress this activity too long, instead of directing and furnishing it with a suitable outlet, is to disregard its providential origin. Consequently, the periods of inaction imposed on pupils by the school regulations should not be unduly prolonged; young children especially should often change exercises. To change places, to sit down, to stand up, etc., constitute for them an indispensable relaxation. On the other hand, games, particularly those called athletic, which require exertion, are considered essential to the physical education of the child. Besides, from the moral and intellectual points of view, they procure advantages which contribute not a little to their importance.

However, gymnastics have the advantage over games of exercising alternately and in a rational way all the muscles of the body, instead of acting only upon some of them. They constitute, so to speak, the science of bodily movements. Gymnastics are necessary for the

normal development of the organs, the activity of circulation and assimilation, and the prevention or correction of physical defects. Gymnastic exercises make the muscles supple, and give a free gait and movement.

Practical remarks. 1. During gymnastic exercises, silence is to be observed.

2. These lessons should not be given too soon after meals.

3. The lessons should be given in the open air. In severe weather, they may be given under shelter.

4. No child ought to be habitually dispensed from physical exercise, unless on account of infirmity or by the doctor's directions.

5. During the lessons, the teacher should exercise an active supervision over the pupils, in order to prevent accidents.

6. Exercises such as hand, wrist, arm, and body movements are chiefly necessary for the little children.

7. Children should not be allowed to enter too violently into the exercises.

III.—Teaching of Gymnastics.

In the primary classes, gymnastics generally consist of simultaneous exercises.

Primary classes. With small children it would be advisable to devote some of the short morning and afternoon recreations to marching or to elementary movements of the head, arms, and legs. Simple and well-chosen songs might accompany the movements, to give them spirit, and to help them to keep time. These exercises habituate the pupils to order and discipline.

Grammar grades. When about ten years old the pupils receive the first regular lessons in gymnastics. Each lesson generally lasts half an hour. Special manuals contain graduated exercises for developing the limbs and making them supple. It is not necessary,

and not always advisable, to perform every movement described in such books. Having made a prudent choice, the teacher ought often to put the pupils through the more useful movements, and to vary them in such a way as to exercise in turn, during the same lesson, the different parts of the body.

The lesson. A preliminary exercise at all drill lessons is the alignment or *dressing* of the pupils according to height. In the lower grades the lesson begins by marching and similar exercises. In the more advanced classes it may begin, especially during cold weather, by marching in quick and double time. The second part of the lesson consists of different movements in position. The teacher arranges the pupils in one or several files, making them keep the distances required for the series of exercises they are about to go through. Before putting the class through an exercise the teacher should:

1. Perform it himself.
2. Point out briefly its aim.
3. Explain its various parts.
4. Have it performed by one of the pupils in the presence of his comrades.

Then follows the simultaneous performance of the exercise, which should be gone through as often as required. But when an exercise has for object the development of the body, it must be performed several times, even though it be perfectly executed. The teacher names the exercise, and having indicated the particular movement keeps all on the alert by calling out: *Attention!* Then he adds the word: Ready! as a signal to start the exercise. To finish, he says: Ranks. . . . halt! These expressions may be replaced by a whistle. The marching is regulated by the words: Forward! and Halt! For all marching these two words may be used, as they have the advantage of being short, and admitting of much energy of expression.

The teacher might occasionally group the pupils in different sections, putting monitors in charge, under

his own supervision. He might also appoint a pupil to give the commands for the simultaneous exercises; this has the advantage of interesting the pupils in the lesson.

There ought to be as great a variety of exercises as possible; and in order not to tire the children, a movement requiring great strain might be followed by an easy one. In general, the exercises requiring most effort should be performed about the middle of the lesson. The intervals for rest should be frequent, but not prolonged; for, under certain conditions of temperature and place, there may be danger of chills.

Expensive apparatus, such as the flying trapeze, the horse, ladders, parallel bars, etc., are not necessary adjuncts of the elementary exercises just spoken of. But simple apparatus, such as dumb-bells, Indian clubs, bar-bells, rings, wands, etc., which are easily procured, may be used with advantage in all schools.¹

¹In marching, see that the children hold themselves erect—shoulders thrown slightly back—chest forward and head upright—also that they walk on both heel and toe, not dragging their feet along the floor or ground. In preparatory classes a flag-drill might be introduced.

PART V.

DISCIPLINE.

The discipline of a school insures good moral tone, progress, and work. Discipline is necessary *for the child*. It governs his will by making him submit to the yoke of an authority which he respects, and to the salutary restraints of ever-watchful supervision. Discipline is also necessary *for the school*, where it excites through emulation a sort of enthusiasm for study and virtue, at the same time that it opposes by moral force all violation of rules. The authority of the teacher, the means of emulation, supervision, and repression, which are conditions necessary for the maintenance of discipline, will form the subject of the following chapters.

CHAPTER I.

AUTHORITY OF THE TEACHER.

I. Nature and foundation of the teacher's authority. A truly educational authority is a moral authority. It has for foundation the esteem, respect, and affection of the pupils for the teachers; the art of commanding; and the coöperation of the parents. **II. Precautions against the weakening of authority.** To remove all that might lessen the respect due to the teacher, to remove what might lead to disorder; to make use of signals.

I.—The Authority of the Teacher.

Nature of authority. The authority which a teacher exercises over his pupils excludes the idea of coercion that would do violence to the will by subjecting it forcibly to rules. Moral authority alone freely directs the soul toward good; it alone is effectual in the education of children. True authority is rather complex in its constituent elements. Resoluteness when a decision is to be made, rapid appreciation of a position, and natural aptness for command are doubtless favorable to the exercise of authority; but it is the ascendancy won for the teacher by his intellectual and professional qualities, and especially by the elevation of his character and virtue, that chiefly constitutes moral authority.

Foundations of the moral authority of the teacher. To establish and maintain authority certain conditions are required, among which the following may be mentioned: respect and esteem of pupils for their teacher; affection uniting them to him; gentleness and firmness; tact and constancy in the exercise of command; and coöperation of the parents of the pupils.

Respect and esteem of pupils for their teacher. Children keep their eyes fixed on their teacher, and without being aware of it, they submit to his direction only because they see in him virtue and self-sacrifice, knowledge and talent. If he is a constant model of moral perfection, they respect and esteem him, and are incited to do good by the examples of virtue which they witness. On the other hand, though the learning of the teacher may not suffice to insure authority that would have good results, if to learning be joined moral qualities, it increases the confidence of the pupils in their guide, and his influence over them.

Reciprocal affection between teacher and pupils. The devotedness and affection of a teacher for his pupils are the great secret of his influence over them. This affec-

tion, tender without weakness or partiality, generous and far-reaching, dilates the heart and triumphs over the most obstinate resistance. Children cannot refuse their affection to him who devotes himself to them; and not only do they love him, and allow him to direct them according to his wishes, but they love the school and attend regularly because they feel at home there.

Prudent exercise of authority. The principal qualities of authority wisely exercised are mildness, firmness, tact, and constancy.

Mildness, calmness, and moderation in the exercise of authority dispose the pupils to obey, and leave the rebellious no excuse for their faults. These qualities enable the teacher to avoid all injustice and excessive severity; they reveal a strength and a nobility which subjugate even the most refractory. The teacher must also exercise firmness to keep the children from despising his authority, and to inspire them with a dread of violating regulations. They will, then, fear to offend him whom they love, and to draw down upon themselves a penalty from which there is no escape in the case of wilful fault. But it will not suffice for him to rule with mildness and firmness, if he does not also show tact. It is tact—the talent of always doing the most suitable thing—which enables him to decide whether he ought to act now or later on, to speak or to remain silent; and also shows him how far he may go in commanding, blaming, or praising, according to the individuals concerned, their dispositions and the circumstances of time and place. Finally, constancy strengthens his authority by opposing the changeableness of children, and by removing all their doubts as to what ought to be done or avoided, and as to the certainty of rewards or punishments.

Coöperation of the parents. Without realizing it, children are convinced that the authority of their teacher is a delegation of the right and duty of their parents to educate them. If then the direction and advice given

in school are strengthened by a complete unanimity of views in the family, the child will not venture to oppose the teacher's directions. But it would be quite otherwise if the teachings of the school were weakened by the imprudent talk, the indirect complaints, or the formal blame of the parents. The formation of character would then be compromised, or even rendered impossible. A good understanding between the teacher and the parents may be established by the regular and careful correction of exercises; by sending weekly or monthly reports; and by courtesy in the necessary intercourse, and by exhibitions and receptions in school.

II.—Precautions Against the Weakening of Authority.

The authority of the teacher may be weakened, or even destroyed, by many different causes: some lessen the pupil's respect for their teacher, others lead to disorder and want of discipline in school.

Means to be taken by the teacher to preserve the esteem of pupils. 1. To prepare his lessons well, and thus avoid mistakes, hesitation, etc., which might make the pupils doubt his knowledge.

2. Not to be fickle in opinions, resolutions, and desires, nor inconstant in the application of means to attain an end.

3. To guard against inconsiderate or uncharitable criticisms, want of gravity, dignity, etc.

4. To repress acts of impatience and bad temper, in order to avoid bitter words, sarcastic or violent remarks, and inopportune or unjust punishments; and to act and speak as if the parents of the pupils were present.

5. To watch over himself so as not to be guilty of lapses in speech, which by repetition might become habitual and detrimental.

6. Not to be too rigorous in exacting duty, nor act with the same rigid inflexibility toward all the pupils, without being willing to accept a legitimate excuse.

7. Not to seek for popularity, especially by concessions contrary to the regulations.

8. To show equal devotedness to all, and not to attach one's self to any one by special or exclusive friendship.

9. Not to irritate pupils by a sort of uneasy and suspicious distrust, or by indiscreet inquiries which would make them anxious to baffle such vexing supervision.

10. Above all, to watch over one's self so as not to give bad example.

Means of maintaining order. Experience has shown that the following remarks deserve the special attention of the teacher:

1. To arrange the pupils so as to render vigilance easy and to prevent disorder: for instance, to place the most heedless near himself; to avoid putting a young pupil beside a much older one, or two idle or giddy ones together, especially if they are at a distance from him.

2. To prepare the lessons well and give them with earnestness, clearness, and in an interesting manner, so that the attention of the pupils may be sustained.

3. To begin the lessons exactly at the time prescribed.

4. If there be several sections in the class, to keep them all busy.

5. To distribute promptly and with order the copy-books that have been examined, the written competitions, specimen copies, etc.: perhaps the best way is to have the different articles distributed by the first pupil in each desk.

6. To take precautions that the pupils may have the class requisites; books, copybooks, pens, etc.

7. To establish no system of emulation that might be an occasion of disorder, noise, or quarrels.

8. To grant no permission, to answer no question, to give no explanation, when asked in a boisterous way. When a pupil makes a mistake, and several are eager to correct him, to accept the correction from those only who have caused no disorder.

9. To speak but little, and in a low tone; to use the

signal properly, and close the doors without unnecessary noise.

10. Rarely to make use of the sign for attention, and to avoid using it when the pupils are occupied with their lessons.

11. Not to leave in their possession or under their eyes anything calculated to distract their attention.

12. To inflict no punishment that may disturb good order and discipline.

13. To be prompt in designating the pupil who may leave the room, when several ask at the same time.

14. Not to allow the pupils to talk during the changes.

15. If the class of which a teacher assumes the management is disorderly, he should try to discover the causes and remedy them, beginning with the principal ones, and passing afterward to those of less importance, till all have disappeared.

Code of signs for use in schools. Except in oral lessons, explanations, and interrogations, the teacher should be very sparing of his words: the preservation of his health and the maintenance of order in the class enjoin silence. To facilitate the observance of silence, many conventional signs have been established to replace words. In using these signs an instrument called a *signal* is employed.

The following are some of these signs:

1. One stroke of the signal serves to call for attention, to begin or suspend a lesson, to interrupt a pupil at any lesson, or to tell him to continue.

2. When a reader makes a mistake, the teacher strikes the signal twice in succession; the same sign is used when the pupils fail in any duty.

3. To make a sign to read slowly, the signal is struck twice, at distinct intervals.

4. To make a sign to speak louder, the teacher, after striking the signal, raises its point vertically; to make a sign to speak in a more subdued tone, he lowers it toward the ground.

5. To suggest less noise in reading or studying, he raises the signal to his ear, or strikes once to suspend the exercise for a moment.

6. To change the lesson, the teacher strikes the signal three times in succession.

7. When a pupil holds his pen wrong, his attention is called, and the teacher shows the correct manner. To tell an idle pupil to write, the teacher having secured his attention, makes the finger motion.

8. At the end of the writing lesson the teacher strikes the signal three times at intervals: at the first stroke, copybooks are dried and closed; at the second, they are passed to the ends of the desks; at the third, a monitor collects the bundles in order. An inverse order is followed in distributing the copies at the beginning of the lesson.

9. To correct a defective posture, the pupil's attention is called, and the teacher assumes the posture which the pupil should take. On all similar occasions, the teacher first secures the pupil's attention, and then does what he wishes the pupil to do.

N.B. The code of signals must be thoroughly known by teacher and pupils, frequently practised, and always in the same manner.

CHAPTER II.

EMULATION.

I. General considerations on emulation. Nature and object; necessity and aim. **II. Means of exciting emulation.** (1) Encouragement. (2) Taking places in class. (3) Formation of rival camps. (4) Privileges or good marks. (5) The weekly and monthly certificates of merit. (6) Honorary distinctions: right of requesting pardon, medal of honor, inscription on roll of honor. (7) Rewards and prizes.

I.—General Considerations on Emulation.

Its nature and object. The object of emulation is to excite the will of the pupils to perform their duties well. It establishes a close but legitimate competition among them for the gaining of the best prizes, and the highest places in the competitions: this is *emulation in work*; it also excites the heart to the practice of virtue, by the sight of virtuous actions: this is *emulation in virtue*. The natural result which emulation ought to produce is, not to develop self-love or conceit in the pupils, and thus foment jealousy, animosity, and division; but rather to excite in them intellectual and moral activity, by proposing as motive for their actions, not the hope of success and reward only, but the desire to merit the approbation of their conscience and of God, as well as that of their parents and teachers.

Its necessity and aim. In a class there is scarcely any middle course between emulation in work and virtue, and mutual incitement to tumult and disorder. The uninterrupted and reciprocal influence of the pupils upon one another, determines among them general tendencies which drag the majority toward good or evil; the class is good or bad according to the nature of these tendencies. Emulation in virtue weakens the tyranny of human respect among pupils, and inclines them to listen with docility to the instructions and advice of the teacher. Emulation in work maintains love for study, and thus contributes to the development of the faculties, and lays the foundation of future success. In order that this praiseworthy sentiment of emulation may not deviate from its true aim, it must be carefully directed. In insisting on the motives which ought to inspire a Christian, the teacher should attend to the following hints:

1. He should explain to the pupils that merit does not consist in surpassing their fellows, but in surpassing themselves by their continual efforts to attain what is

best: this is a noble emulation, and it is quite exempt from danger.

2. In his decisions he must show that he appreciates persevering effort more than success; hence he should not give preference to the highly gifted pupils, or punish the dull, if they have given proof of good-will and application to work.

3. He should not give rewards for mere success without effort on the part of the pupils.

II.—Means of Exciting Emulation.

Emulation excites sentiments calculated to aid the pupil in the fulfilment of his duties. Its principal advantages are, that it makes him accomplish much in a short time without undue fatigue, that it renders punishment rare, and causes the school and the teacher to be loved. To judge a means of emulation we must examine whether the sentiments it inspires are noble and legitimate, whether it is really effective in procuring and maintaining order and application, and whether it does not occasion undue fatigue or disorder. Any means of emulation, however good, fails to produce the same effects indefinitely; after a while the pupils become habituated to it, and its force is neutralized. It is well to have many incentives at one's disposal; to begin by the ordinary means, to use the most effective only when required, and never discontinue any one until its advantages have been exhausted. Although a teacher ought to prefer such helps as are calculated to make the pupils uniformly and permanently industrious, yet he may use temporary expedients; thus, for example, if some lessons are to be quickly learned they might be given as tests of ability to the entire class. The principal means of emulation are: encouragement; the taking of places according to merit; competitions and examinations; promotions to different grades or sections; the formation of two rival camps or the division of the class into contending groups; challenges; privileges or good

notes; weekly reports; testimonials of merit; medals of honor; inscriptions on the roll of honor; rewards and prizes.

Encouragement. To encourage pupils is one of the best means of directing and educating them. The principal forms of encouragement are kind words and praise. When, in the performance of his daily duties, the child gets weary or discouraged, the kind word of the teacher gives him fresh strength and confidence. Praise excites the feeling of honor; its use is then legitimate; but certain precautions are necessary to attain the desired result, which is to urge pupils to more generous efforts.

1. Praise should be deserved, and proportioned to merit.

2. Praise ought not to be lavished on certain pupils, and refused to others equally worthy of it.

3. When a public eulogium is made, it ought to refer to some well-known event which would win the approbation of even envious pupils.

4. The teacher must not praise too frequently, and he should be careful of the expressions he employs. If he praises too often, and with exaggeration, his eulogies lose their value; if too rarely or coldly, he is likely to discourage.

5. In praising a pupil it is well to let him understand that by new efforts he is capable of attaining still better results.

Taking of places. In those lessons in which the pupils stand in order of merit, this means may be advantageously employed: whenever a pupil gains a point over a companion, he passes above him. These changes of place are used in the lower classes in reading, and in all the classes for writing and memory lessons. The pupils are thus constantly kept on the alert; competition is continuous; and the teacher has an efficacious means always at hand for reward or punishment. In employing this means, the teacher should avoid:

1. Advancing a pupil too many places at once.
2. Promoting him from one section to another.
3. Advancing him from motives foreign to the lesson in which he competes.

Rival camps. This is a means of emulation the educative value of which is open to discussion. It establishes between pupils in the same camp a bond of union conducive to industry and order. Even the lazy become enthusiastic and are stimulated to work. However, it is not desirable to encourage too great solidarity between the members of a camp, as would be the case if all in the losing camp were punished, or if those in that camp who had known their lessons well, and had tried to maintain good order, were not rewarded. Treatment of this kind would be discouraging. However, the solidarity must be sufficient; and this may be secured in the following way: A closed box with an opening in the lid is placed on the teacher's desk. Pupils who fail in lessons, or who transgress class regulations put a good note in the box. At the end of the week, all these good notes are divided among the members of the victorious camp.

The formation and direction of rival camps may be regulated as follows:

1. It is necessary to reconstruct the rival camps and change the leaders frequently, choosing those among the pupils who know their lessons very well, and who have considerable influence with their fellow-pupils.
2. The rivalry must not be carried so far as to occasion quarrels. When too close companionship has been observed between pupils, they might with advantage, be placed in opposite camps.
3. If any pupils neglect or injure their camp, and their companions fear defeat as a result, the leader of the affected camp should tell the teacher, who might strike their names from the list of competitors. The leader of the opposing camp might name an equal number of the least loyal of his followers. These last should,

however, share in the good notes, if their side is victorious, provided they have known their lessons. Pupils so excluded ought to be questioned more exactly than the others in the various lessons.

Challenges. The challenge is an oral exercise in which the pupils that contend for the first place are questioned by the other pupils of the grade, or in which the pupils successively question one another. Previous to a challenge the day and subject are determined; all the pupils prepare themselves for it, and without going beyond the programme, each arranges his questions and prepares answers to them. It is necessary to insist that the same question be not put by two pupils, and that each pupil know the answer to the question he proposes. The subject-matter of a challenge generally includes the studies of a fortnight, and sometimes of a month. Challenges must not be too frequent. They might be made chiefly on the truths of religion, on history, spelling, grammar, geography, and similar subjects, and be conducted on the following plans:

First plan. Five pupils, arranged according to their proficiency, go to an appointed place in the class-room, to answer successively the other pupils, who in turn propose one of the questions they have prepared. If a pupil fails, he is excluded. At the end of the contest the successful pupils, as well as each of the questioners who may have caused an opponent to fail, are rewarded.

Second plan. The last pupil questions the next in place, who answers, and then questions the one above him; and so on with the others. When a pupil does not know the answer, he requests his rival to give it, and puts a question to him in turn. If this pupil cannot answer, both keep their respective places; otherwise the pupil who gives the two correct answers gains a place. Whoever gains most places merits a reward.

Privileges or good notes. Good notes are certain impressions on paper or cardboard, to which given

values are attributed. There are privileges of five, ten, and twenty ordinary good notes. The teacher ought to attach great importance to the good notes, in order that the pupils may appreciate them. Privileges of ten and twenty should be given very rarely, so as to keep in reserve the most efficacious means for times of apathy; it would be well not to make use of them till toward the close of the school year. If teachers succeed in exciting interest in regard to these notes, most beneficial results will be produced. The judicious and constant use of this means alone will suffice to obtain order and progress.

Observations. 1. The child attaches to good notes an importance proportionate to the advantages they procure him; if the rewards be insignificant or only very remote he will give himself little trouble to merit them.

2. Good notes are useful to the pupil to enable him to participate in the rewards given at the end of each month, or every three months; to exempt him from some punishment, or to satisfy for certain faults.

3. The number of notes required to obtain exemption from punishment must be moderate.

4. Except for faults of exceptional gravity, good notes ought to be accepted as compensation for punishments deserved.

5. In general, good notes should be distributed at the end of each lesson; but in the primary classes they may also be given during the lessons, to prevent the inattention so natural to young children.

6. Good notes might be given sometimes for success and sometimes for diligence, so that both the studious and the well-conducted pupils may gain them.

7. A twofold abuse is to be avoided in the use of good notes: to be so parsimonious that pupils cannot gain a sufficient number to exempt them from ordinary punishments; or so lavish that the children cease to value them.

8. It would be an advantage if the teacher had good notes of a particular class, of which he would make use

to reward the pupils who were first in the examinations and monthly competitions. The pupils who obtained and preserved the largest number of these notes might compete for special prizes toward the close of the school year.

9. It is necessary to watch certain pupils who are inclined to traffic in good notes, either to acquire them for themselves or to barter them to their comrades. This may be, in part, prevented by having a different color and form for the good notes of each class.¹

Weekly certificates. The coöperation of parents being indispensable to obtain application and good conduct from the pupils, nothing should be neglected to secure it. Among the means that may be employed for this end, the most effective are *weekly certificates* and *Honorable Mentions*. Weekly certificates might be of three kinds: *Excellent*, *Good*, *Fair*. Every Friday each pupil receives the one which he deserves. These certificates are brought back to school on Monday, and given to the monitor who has the charge of keeping them.

Honorable mentions. The pupil who has every week received the certificate *Excellent* is entitled at the end of the month to an *Honorable Mention*, or certificate of honor. He who has received during the month more certificates marked *Good* than *Fair* is entitled to a *Testimonial of Merit*. The teacher should keep account of the certificates awarded to each pupil. Honorable Mention may be written thus:

.....SCHOOL.

Honorable Mention

Awarded to.....in testimony of his
Good Conduct and Diligence during the month of
..... 19....
.....Principal.

¹ A monitor may be put in charge of the good notes.

Another form, showing the result of the month's work, may be worded as follows:

.....SCHOOL.

This Testimonial of Merit

Is awarded to.....of the.....Class,
for his Good Conduct and Diligence during the month
ending.....19.... He obtained.....
per cent.

.....Principal.

The right of requesting pardon. A reward of very great moral influence, and one that pupils appreciate highly, is the right to solicit for some one of their comrades, an exemption from punishment. This right is generally granted only to a pupil who is first for good conduct. He may use it only as a request, and when the fault to be punished is not very serious. The number of exemptions that may be solicited in one week must not exceed five.

The medal of honor. The medal of honor, when its use is properly regulated, contributes greatly to the advancement of the pupils and the good discipline of the class. It should never be granted except for merit, nor should it be worn by the same pupil for more than eight days. It would be advisable to have, in all classes, a medal for each subject of the programme, and, in addition, one for good conduct. As it is not the intrinsic value of the medal that makes it appreciated by the pupils, it ought not to be costly, so that there may not be any great expense in case a child should lose it.

The roll of honor. The names of the pupils who observe the school regulations perfectly are written on the roll of honor, which is hung up in a conspicuous part of the class-room. The pupils who merit such inscription are designated by the teacher, after the dis-

tribution of Honorable Mentions; they are exempted from certain punishments during the month. But if any pupil so inscribed commits a grave fault, his name should be erased, and from that moment he is to be treated like the other pupils. Very few names ought to be placed on this roll, and the expunging of a name should be of very rare occurrence.

Rewards and Prizes.

Methods of distributing rewards. The teacher ought to apportion at the end of every month for the primary classes, and of every quarter for the others, a certain number of rewards. Their total value may be proportioned to the number of children, their diligence, progress, and good order in class. A teacher who wishes to excite emulation among his pupils, and to secure progress, ought to give no reward but in exchange for good notes.

At the end of the month, or quarter, the teacher, having fixed upon a day for the distribution of rewards, tells the pupils to bring all their good notes in an envelope, on which they should write their names and the number of their notes; two or three pupils are appointed to verify the correctness of the numbers.

The rewards being laid on a table, the teacher calls the pupils according to the number of their notes. The first then advances, and, handing in his good notes, selects what pleases him most; the others act in the same way. The pupils who may hope to obtain a more valuable reward at another distribution should be free to keep their notes.

Remark. It is sometimes desirable to give as prizes class-books, and such instruments as are necessary in the study of school subjects. Good notes would be much valued by the pupils, if by their means they could procure some of the things needed in promotions from one grade to another.

CHAPTER III.

SUPERVISION.

I.—General Considerations on Supervision.

Its nature and necessity. Supervision is the active and unceasing exercise of the solicitude of a teacher to preserve his pupils from physical and moral danger, and to form their conscience by reminding them of their duty. It consists not only in external supervision, which confines itself to preventing reprehensible acts or punishing them, but also in the immediate influence of the teacher who, by his presence, keeps his pupils in the accomplishment of their duty.

Supervision is essential in a school. To enlighten the conscience of the child by instruction does not suffice; it is necessary to watch over his conduct, in order to preserve him against his own weakness, and the pernicious influences to which he might be exposed. It is negligence or misplaced kindness to leave pupils without supervision, on the pretext of thus exciting their personal initiative. *Do not abandon the child to his own guidance*, says the Holy Spirit in the book of Proverbs. "Be vigilant over children," writes St. John Baptist de la Salle, "for there is no order in a school unless the pupils are supervised." Besides, experience proves that there is neither morality, piety, discipline, nor constancy, in a school where conscientious supervision is not maintained.

Qualities of effective supervision. Supervision to be effective should have the following qualities: universal, constant, active, foreseeing, firm, calm, upright, and discreet.

Universal supervision. Supervision should be universal as regards the children, and as regards their actions. Children need to know that they are super-

vised. An experienced teacher does not relax his attention and solicitude even with children who are naturally quiet, or whose piety is exemplary: the gentleness of the former may sometimes hide violent passions; and the budding virtue of the latter deserves all the more care, as it makes them more pleasing to God. Supervision must vary in method according to the various dispositions of the pupils, but it should extend to all.

Constant and active supervision. Constant vigilance is necessary, because the invisible enemy who tempts them is quick to take advantage of the teacher's inattention. As far as possible, a good superintendent does not lose sight of his pupils: their glances, the play of their countenances, their movements and bearing, tell him if their attention is distracted, or if they are attempting to break the regulations. The teacher should not occupy himself in class with personal work, no matter how short, or how little absorbing; and if he is obliged to absent himself, he should request a colleague to be kind enough to replace him.

Foreseeing supervision. The better to safeguard the pupils, the teacher ought to foresee the occasions in which they may attempt to escape control. He should so well determine upon everything beforehand, the orders to be given, the prohibitions to be made, etc., that he may never be taken unawares, or at least only very rarely. At the same time he must not have the air of making his arrangements with cunning, for certain pupils would be only too anxious to baffle his plans.

Firm and calm supervision. The teacher must remember that he is placed in charge of the pupils not to be the passive witness of their insubordination, but to prevent it, or repress it with vigor. On the other hand, his vigilance should not be uneasy, suspicious, or embarrassed, for that would be irritating to the pupils. His constant, watchful care ought to be peaceful and calm, without uneasiness or trouble, fear or affectation.

Upright supervision. Supervision is upright if it has none of the worrying characteristics of an over-anxious zeal, or suspicious distrust. Without ceasing in his vigilant attention to their conduct, a tactful teacher lets his pupils know that he does not doubt their uprightness. He does not hide in order to spy on them; he has not recourse to any clandestine means irritating to upright characters. Far from the pupils ever seeing satisfaction in his face when he discovers them in fault, they will perceive his regret at having to punish them.

Justice requires that the teacher should never encourage a system of tale-bearing. Except where a child, accomplishing a conscientious duty, tells him of a grave fault which causes bad example, the teacher should energetically repel all tale-bearers; they are generally mean, envious characters, flatterers, or liars.

Discreet supervision. Supervision cannot, without danger or fault, be inquisitorial or slanderous. Let the teacher see all that passes in class: but on the one hand, let him beware of calling attention to mere nothings; and on the other, let him not awaken, by a want of circumspection, candid, youthful minds to a premature knowledge of evil. He should be very prudent and keep silence on anything of importance that the exercise of his supervision may have revealed to him; and he may mention it only to the person whose duty it is to remedy the evil.

To sum up the obligations of the teacher, in the exercise of supervision, his motto ought to be: "See everything, prevent many things, and punish few things."

II.—Exercise of Supervision.

In class. A careful preparation of lessons enables the teacher to give them without being too absorbed by book or notes; and if he works at the board or asks questions, he is not preoccupied to such an extent as to neglect all supervision. While he is speaking, he

should require the pupils to hold themselves well, with their hands on the desks. During the changes he ought to say nothing and allow no one to speak to him; the pupils must keep silence in word, and in action: walking lightly, opening and closing desks and doors noiselessly, placing gently on the desks books, rules, copybooks, and other objects which they use.

The proper placing of pupils in class is an important aid in securing good conduct, application to work, and effective supervision. As far as possible, thoughtless children ought to be placed near the teacher's desk; and those whose sight is weak, near the black-board. If the pupils are assigned places which they are to occupy permanently, the younger should not be mixed up with the elder; very giddy pupils should not be put in the same desk without separating them from one another by serious and attentive children. A pupil of bright intellect and kindly disposition might be put beside one of quiet character and slow to learn. The positions of the pupils may be changed, not only according to the monthly examinations, but as often as it seems advisable to do so.

No pamphlet or book may be brought into the school without the permission of the teacher. The pupils should be warned that the circulation of a bad book is a most serious fault.

Out of class. The teacher's supervision should follow the pupils everywhere: during the general changes, going to and returning from the yard, at recreation, etc. At the general changes the pupils should walk in line and keep silence. To supervise well, the teacher must always place himself in a position to see as many of the pupils as possible.

Pupils ought not to be allowed to go to the yard during lessons. However, the teacher must be careful, especially with young children, not to be too strict on this point. The absences should be short, and two pupils of the same class must not be allowed out at the

same time. If pupils know that the teacher is particular about this matter, and if the lessons are suspended for a few minutes about the middle of the morning and afternoon sessions, when all the pupils are taken to the yard, requests to go out will be rare. During the recreations, the teacher should always be present and carefully watch over the pupils.

CHAPTER IV.

REPRESSION.

I.—General Considerations on Repression.

Nature and general modes. Repression or correction is an act of authority by which the teacher opposes, and sometimes punishes, breaches of discipline, in order to prevent their recurrence, and to obtain the amendment of the guilty. The duty of correction is incumbent on the teacher. He has to guide his pupils in the right path, and persuasion is not always sufficient to hold them to their duty. Besides, if he does not correct the more notable delinquencies, he runs the risk of seeing some of the children take advantage of his weakness to violate the rules still more seriously. There are three general modes of correction:

1. The warning or simple reminder of the rule broken.
2. The threat, that is, a notice of the penalty which would follow reiterated faults.
3. The punishment or penalty inflicted on the pupil, to convince him of the necessity of not relapsing into the fault.

Opportuneness of correction. From the fact that punishment is a duty for the teacher, it must not be concluded that recourse should be had to it for all sorts of failings. There are some faults for which it is better

not to punish. The teacher should not punish: (1) For any fault caused by an excusable ignorance of the regulations, as in the case of children newly admitted to the school; (2) for want of success in study, when otherwise good-will is shown; (3) for a doubtful fault; (4) for a fault of which the child spontaneously accuses himself, unless he frequently falls into it; (5) for faults committed at home, even when the parents request him to do so; (6) for small failings in order, silence, punctuality, good employment of time, etc., if not habitual.

Failings such as those enumerated deserve only an admonition. The observance of this principle would maintain discipline, prevent serious faults, and combat carelessness.

The faults to be punished are: persistent idleness, habitual want of diligence, teasing and roughness between pupils, disobedience, falsehood, murmuring, etc.

II.—Means of Repression.

The ordinary means of repression are: admonition, reprimand, threat, withdrawal of good notes, giving of bad notes, standing apart, tasks, apologizing. Such punishments as intimation to the parents, temporary dismissal and expulsion, must be made use of by the principal only.

Admonitions. Admonitions are efficacious when given with kindness and moderation. It is well to maintain a just medium between the too great indulgence which refuses to see all slight faults, and the rigor which will not allow the smallest fault to pass without calling attention to it.

Reprimands. Reprimands are severe rebukes addressed in public or in private to one or to several pupils. They are given by look or word. A reprimand is effective when the teacher is beloved, when he

is habitually calm, speaks gently, and is an observer of silence.

Remarks. 1. Reprimands should be given with calmness, dignity, kindness, firmness, and without useless words.

2. The humiliation caused by a reprimand is salutary only when the manner in which it is given makes the pupil perceive that he can regain the esteem of the teacher.

3. The teacher, while reprimanding, may exhibit severity of countenance, but not anger, resentment, or spite. His language must be becoming, neither ironical nor insulting; he should carefully avoid every injurious epithet, as well as every expression that would reflect on the parents.

4. A pupil must never be left under the sting of a reprimand; the teacher ought to make him understand that he can correct himself.

5. Reprimands are more efficacious if words of praise are spoken to well-behaved pupils, and even to the censured pupil for matters in which he has given satisfaction.

6. Reprimands ought not to be given to a large number of pupils: general reprimands are ineffective, and they give the pupils a dislike for the teacher.

7. The teacher should avoid indefinite, vague fault-finding, and never exaggerate the fault he censures.

Threats. Threats announce punishment: they should never be made without weighty reasons, or without having examined if it would be possible and proper to carry them out; but they must be carried out if the fault sought to be prevented is committed.

Withdrawal of good notes. The withdrawal of one or several good notes is a very efficacious punishment in the hands of an experienced teacher. Since good notes serve for exemption from tasks and as capital to acquire rewards, taking them from pupils who fail to follow the

regulations is a very telling penalty. On the other hand, as the pupils need only to be diligent in order to gain other notes, the punishment does not irritate them, if it be moderate.

Bad notes hold the greater number of the pupils to their duty. After being called to order for breaking silence, for instance, the teacher marks one or two bad notes after the name of the delinquent. Five or six of these notes would be sufficient to deprive him of the certificate *Excellent*. At the end of the week the bad notes can be cancelled, wholly or in part, by means of good notes.

Standing apart. Sometimes, to punish inattention, the pupil should be requested to stand at his place for three or four minutes; if he relapses, he might be sent to the middle of the class-room. The teacher may impose this punishment for any other fault if he judges proper, avoiding however its frequent use, as it injures discipline. The offender must not be left too long in the same position. In some classes, this mode of punishment is very advantageously employed to punish pupils who come late to school. The first who arrives after the appointed time stands in a certain place, and remains there until a second comes to replace him; the second waits for the arrival of a third, and so on.

The teacher should avoid making a pupil stand outside the door of the class-room, because such a measure, being a public avowal of weakness or want of control, would be injurious to his authority. Besides, at certain times, it might injure the pupil's health.

Tasks. A task means a certain number of *lines* to write or memorize. At the close of school, pupils who have received tasks are told the page from which they are to copy. At the beginning of the following class they must present their tasks. Tasks should be given rarely to the same pupil, but the teacher ought to require that they be very well written; that the spelling

and punctuation be correct; and that all the lines be well filled. If the task be oral, it must be recited literally and without hesitation. A task lacking one of these qualities should be performed again.

Apologizing, asking pardon. When a pupil has seriously failed in respect to the teacher, he may be required to apologize or ask pardon. The form of this apology will depend upon the fault committed, as well as on the age and dispositions of the pupil. It may be public or private according to the nature of the fault. The teacher ought to make the act of apologizing as easy as possible.

Intimation given to parents. When a pupil entirely neglects his duties, or is absent frequently, or allows his tasks to accumulate, the principal should acquaint his parents with the fact.

Temporary dismissal. Temporary dismissal consists in forbidding the pupil to return to school until he has performed the tasks imposed. This punishment may be inflicted only for very serious faults, and even then only when the pupil has refused to give satisfaction otherwise. The principal should send a note to the parents explaining the cause of the dismissal.

Expulsion. This punishment, which is an extreme measure, ought not to be inflicted but for grave reasons. The principal should notify the parents in the most respectful terms and refrain from announcing the expulsion in the school. A principal must not by excessive severity force a pupil to leave the school. Expulsion must not be resorted to until after consultation with the proper school authorities.

III.—Conditions That Should Accompany Correction.

To punish a child is to impose on him a disciplinary penalty in order to strengthen his will, to increase his sense of responsibility, and thus keep him on his guard

against new faults. To produce these results, correction must have certain qualities: some relating to the teacher, some to the pupil.

Conditions relative to the teacher. On the part of the teacher, correction should be disinterested, charitable, just, moderate, peaceful, and prudent.

Disinterested. It ought to be imposed to check insubordination and maintain order. Aversion, revenge, or ill-humor must have no part in its infliction.

Charitable. The teacher ought to have no other end in view than to correct and perfect the delinquent. Hence he should never inflict a punishment without examining if it will benefit the pupil, and if the same results may not be obtained otherwise. All punishments must be avoided that would serve only to inspire the spectators with fear.

Just. Correction is just if it is inflicted for deliberate faults, and not for involuntary failings. Children know what they deserve; they know if they are fairly or unfairly treated, and an unjust punishment is no less demoralizing to them than impunity. Justice requires also that punishments be apportioned to the gravity of the fault, to the age of the pupils, to their moral dispositions and intellectual development.

Moderate. Punishments should be moderate in severity and frequency. The principal means of rendering punishments infrequent are: (1) To make known the school regulations, and explain them to the pupils; (2) to exercise active and constant supervision; (3) to prepare the lessons well in order to make them interesting; (4) to follow exactly the daily regulation; (5) not to impose a task that is too long or too difficult; (6) not to threaten lightly, or give expression to threats that cannot be executed; (7) not to threaten many pupils at the same time; (8) not to exact anything from a pupil when he is under the influence of passion.

Calm. The teacher should never punish when under the influence of strong feeling. Pupils soon detect when temper and impulse instead of reason dictate the punishment; they despise and hate the teacher who is guided by passion, and refuse to recognize his claims. A prudent teacher will wait until he and the pupil have completely regained self-control. Punishment inflicted in the heat of passion cannot be well received, nor can it produce good results.

Prudent. Correction to be prudent must be neither ludicrous nor too humiliating. In chastising, the aim is to maintain order in class; this would not be attained if the punishment excited the laughter of the pupils. The teacher should give no punishment that might be followed by unpleasant consequences.

Conditions relative to the pupil. Respectful. The pupil should receive punishment with submission and respect. If a pupil be wanting in respect, it would be better by gentle reproof to make him own his fault and correct it than to punish him; and even if compelled to punish, it would be better to correct the pupil for the disorder, scandal, or obstinacy, than for the direct offence.

Voluntary. Correction does not tend to improve the pupil unless he accepts it without recrimination or murmuring.

It is not possible to suppress all punishment in school; the inconstancy and heedlessness natural to children make them commit faults for which they must be checked. But if corrections are given and received with the dispositions mentioned above, they will become less frequent; for, according to St. John Baptist de la Salle, "the pupils will profit by them, and God will give His blessing."

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